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USAAVLABS TECHNICAL REPORT 69-94

AN EXPERIMENTAL INVESTIGATION OF THE EFFECTS OF ROTOR HEAD CONFIGURATION AND FUSELAGE YAW ON THE WAKE CHARACTERISTICS AND ROTOR PERFORMANCE OF A 1/8TH SCALE HELICOPTER
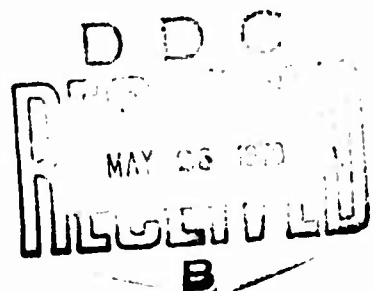
By

James C. Linville

AD 869390

February 1970

U. S. ARMY AVIATION MATERIEL LABORATORIES
FORT EUSTIS, VIRGINIA

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Task 1F162204A13903
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USAAVLABS Technical Report 69-94
February 1970

AN EXPERIMENTAL INVESTIGATION OF THE EFFECTS OF ROTOR HEAD
CONFIGURATION AND FUSELAGE YAW ON THE WAKE CHARACTERISTICS
AND ROTOR PERFORMANCE OF A 1/8TH SCALE HELICOPTER

SER-50604

by

James C. Linville

Prepared by

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for

U. S. ARMY AVIATION MATERIEL LABORATORIES
FORT EUSTIS, VIRGINIA

SUMMARY

A wind tunnel test was conducted to investigate the effect of rotor
head configuration and fuselage pitch and yaw angle on the rotor perfor-
mance and wake characteristics of helicopters. The test model had a rotor
diameter of 9 feet and was a 1/8th scale representation of a generalized
40,000-pound helicopter. The model rotor was scaled to be dynamically
similar to a full-scale rotor when operated at half full-scale forward and
tip speeds.

Test configurations included two rotor head fairings in addition to
the basic rotor head. One fairing was a "cap" fairing similar to that
used on the Sikorsky CH-3C helicopter. The other fairing consisted of an
ellipsoidal shell which covered the rotor head, and a streamlined enclosure
for the rotor shaft and control system pushrods. This streamlined en-
closure incorporated blowing boundary layer control jets which were in-
tended to prevent flow separation. The basic rotor head with and without
the ellipsoidal fairing was tested with rotor blades; the cap fairing was
not tested with rotor blades.

From results obtained in this test, it has been concluded that heli-
copter yaw angle has no significant effect upon rotor performance. Wake
survey data showed that the wake of the helicopter tends to remain directly
downstream of the helicopter rotor head for the pitch and yaw angles in-
vestigated. Data obtained for the ellipsoidal rotor head fairing indicated
that the boundary layer control jet mass flow during this test was not
sufficient to forestall separation around the fairing, and therefore no
drag reduction was obtained. However, previous full-scale tests, partially
reported in Reference 1, demonstrated that significant reductions in drag
and wake size can be obtained with this type of fairing with sufficient
boundary layer control. Data obtained for the cap fairing did not indicate
the reduction in turbulence or deflection of the wake which is effective in
eliminating "tail shake" in full-scale helicopters. These data showed,
however, that the cap fairing increased the drag of the model rotor head
by about 12 percent.

The wake survey data for the model operating with rotor blades were
not regular or consistent, and no discernible trends could be derived from
these data. All of the conclusions and results concerning the wake char-
acteristics are based upon data obtained without rotor blades.

FOREWORD

This test program was sponsored by the U. S. Army Aviation Materiel Laboratories, Fort Eustis, Virginia, and was monitored by Mr. Patrick Cancro. The wind tunnel test was conducted in conjunction with the Rotor Transient and Steady State Aeroelastic Characteristics investigation which was conducted under the same contract. The work was authorized by DA Task 1F162204A13903, "Advanced Rotary Wing Research".

Mr. Edmond F. Kiely supervised the modifications to the test article and assisted in the supervision of the wind tunnel tests with Mr. L. J. Bain and Mr. C. F. Niebanck. The wind tunnel test was planned by Messrs L. J. Bain, J. P. Rabbott, and E. A. Fradenburgh.

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LIST OF SYMBOLS

A_{1s} — first harmonic lateral cyclic pitch angle with respect to the rotor shaft, positive for increasing pitch on forward blade, degrees

a_{1s} — first harmonic longitudinal flapping angle with respect to the rotor shaft, positive for forward blade up, degrees

B_{1s} — first harmonic longitudinal cyclic pitch angle with respect to the rotor shaft, positive for pitch down on advancing blade, degrees

b — number of blades

b_{1s} — first harmonic lateral flapping angle with respect to the rotor shaft, positive for advancing blade flapping down, degrees

C_D/σ — rotor drag coefficient - solidity ratio, $D/\pi R^2 \rho (\Omega R)^2 \sigma$

C_L/σ — rotor lift coefficient - solidity ratio, $L/\pi R^2 \rho (\Omega R)^2 \sigma$

C_P — pressure coefficient $(P_T - P_S)/q$

C_{PM}/σ — rotor pitching moment coefficient - solidity ratio, $PM/\pi R^3 \rho (\Omega R)^2 \sigma$

C_{RM}/σ — rotor rolling moment coefficient - solidity ratio, $RM/\pi R^3 \rho (\Omega R)^2 \sigma$

C_Q/σ — rotor torque coefficient - solidity ratio, $Q/\pi R^3 \rho (\Omega R)^2 \sigma$

C_Y/σ — rotor side force coefficient - solidity ratio, $Y/\pi R^2 \rho (\Omega R)^2 \sigma$

c — blade chord, feet

D — drag measured at rotor hub, pounds

f — parasite area, D/q, square feet

L — lift measured at the rotor hub, pounds

$M_{C.30R}$ — blade chordwise bending moment measured at 30 percent radius

$M_{C.60R}$ — blade chordwise bending moment measured at 60 percent radius

$M_{F.30R}$ blade flapwise bending moment measured at 30 percent radius

$M_{F.60R}$ blade flapwise bending moment measured at 60 percent radius

$M_{T.18R}$ blade torsional moment measured at 18 percent radius

$M_{T.35R}$ blade torsional moment measured at 35 percent radius

N rotor speed, rpm

P_J boundary layer control jet total pressure, pounds per square foot

P_S local static pressure, pounds per square foot

P_T local total pressure, pounds per square foot

PM   pitching moment measured at the rotor hub, positive for nose up, foot-pounds

RM   rolling moment measured at the rotor hub, positive for right side down, foot-pounds

Q rotor shaft torque, positive for powered rotor, foot-pounds

q local dynamic pressure, $\frac{1}{2}\rho V^2$, pounds per square foot

R rotor radius, feet

V forward velocity, feet per second or knots, as indicated

V_J boundary layer control jet velocity, feet per second

V_S simulated forward speed, knots, $(V_S = 2V)$

Y rotor hub side force in the body axis system, positive for force to right, pounds

α_c rotor control axis angle of attack, $\alpha_s - B_{1s}$, degrees

α_f fuselage angle of attack, called ALPHA in Appendix II tables, positive for nose up, degrees

α_{TPP} rotor tip path plane angle of attack, $\alpha_f + a_{1s}$, degrees

α_s rotor shaft angle of attack $(= \alpha_f$ on model), degrees

δ_3 pitch flap coupling angle, tan $\delta_3 = -1.0$, degrees

ϵ upwash angle, degrees

$\bar{\varepsilon}$ average upwash angle, formed by averaging the upwash angle measured by all of the flow direction meters except the topmost meter, degrees. (The upwash angle measured by the topmost meter was omitted because of symmetry.)

θ_c rotor blade collective pitch, positive for leading edge up, degrees

μ advance ratio, $V/\Omega R$

μ^* effective advance ratio, the advance ratio which would have been attained if the rotor blades had been attached, $V/\Omega R$

ρ air density, slugs per cubic foot

σ rotor solidity, $bc/\pi R$

σ' sidewash angle, positive for flow from left to right looking aft, degrees

ψ model yaw angle, called PSI in Appendix II tables, positive for nose to the right, degrees

Ω rotor angular velocity, radians per second

INTRODUCTION

In typical current helicopters, about 30 percent of the total aircraft drag can be attributed to the rotor head. Advanced high-speed rotorcraft will have improved fuselages, resembling the low-drag configurations commonly used for fixed-wing aircraft. Unless rotor heads for these rotorcraft are faired or are much cleaner in design, rotor head drag will account for much more than 30 percent of the total aircraft drag.

Reduction of rotor head drag is a complicated task. The problem is influenced by a number of variables, including the interference of the rotor, fuselage-pylon-rotor head interference, leakage from the pylon, and fuselage incidence and yaw angles. Further complications arise because both the size and location of the rotor head-pylon wake must be considered with respect to the tail surfaces of the aircraft, for these can have a strong effect on tail rotor loads, rudder and elevator effectiveness, and airframe vibrations.

A large amount of experimental work has been done to investigate the drag characteristics of helicopters and helicopter components. Some of this work is reported in References 2 through 6, which are concerned with body force measurements. No wake surveys were performed.

The objectives of this investigation were to study the effects of rotor head configuration, rotor performance, and fuselage pitch and yaw angle on the performance and wake characteristics of a complete, generalized helicopter. Several rotor head configurations were tested with and without rotor blades at various operating conditions. Fuselage yaw angle was varied for all conditions tested. The flow direction and dynamic pressure at the tail of the model were measured, as were rotor shaft forces and moments. When the model was tested with the rotor, blade vibratory stresses were also measured.

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DESCRIPTION OF THE MODEL

The model used in this test was the Sikorsky Aircraft 1/8th scale generalized helicopter model, designed to investigate the aerodynamic characteristics of advanced rotorcraft. For this test, the model consisted of a fuselage which enclosed the rotor drive system and control system and a wake survey rake which was attached to the aft end of the model. A photograph of the model with the wake survey rake and an ellipsoidal rotor head fairing is presented in Figure 1. A more detailed description of the test article follows. The wind tunnel, experimental procedure, data acquisition system, and data accuracy and repeatability are described in Appendix I.

Rotor System

The model rotor was a four-bladed fully articulated system with a radius of 54 inches and a blade chord of 4.24 inches. The resulting solidity was 0.1. The coincident flap-lag hinges were offset 5.6 percent of the rotor radius, and the pitch-flap coupling ratio, tan δ_3, was -1.0 degree pitch per degree of flap. The rotor blades were fiber glass replicas of typical full-scale construction, similar to those described in Reference 7, and were used previously in the wind tunnel tests described in Reference 8. Blade stiffnesses were scaled so that the model rotor was dynamically similar to a full-scale rotor operating at twice the model forward and rotor tip speeds. Table I lists the model operating conditions, including the actual and simulated forward speeds. A schematic drawing of a rotor blade showing the strain gage locations is presented in Figure 2.

The rotor was powered by a 19-horsepower variable-frequency electric motor, and the control system was hydraulically actuated. All of the rotor system components, including the control actuators, hydraulic pump, rotor gearbox, and the 19-horsepower electric motor were mounted inside the model on a separate frame, which was supported by a six-component force measuring balance. The electric power lines, instrumentation wires, and control system wires were routed so as to minimize interference with the balance readings. The balance was of the floating frame, internal strain gage type and was temperature compensated. The slight interactions between force components were accounted for in the data reduction program.

Fuselage

The fuselage is shown in Figures 1 and 3. The model was constructed around a steel frame and was covered with a smooth fiber glass shell fuselage. The fuselage was 9 feet long and had a projected frontal area of 1.25 square feet, not including the rotor pylon.

Model Configurations

The model was tested without rotor blades in the four configurations shown in Figure 3, and with rotor blades in the two configurations labeled FHB and FHBf. Testing with and without rotor blades was conducted at the

same forward speed-rotor speed combinations which are listed in Table I.

The simplest configuration tested without rotor blades was the fuselage with no rotor head, but with the rotor shaft protruding from the fuselage. The model was also tested without rotor blades with the bare rotor head and with two rotor head fairings.

The simplest fairing was a "cap" fairing, Figure 4, similar to the fairing mounted on Sikorsky H-3 series helicopters. This fairing reduces helicopter "tail shake", which is caused by the interaction of the wake of the rotor head with the tail and possibly the tail rotor of the helicopter. The fairing is a dome-shaped cover that fits over the rotor head.

The second rotor head fairing, Figure 5, consisted of an ellipsoidal fiber glass shell covering the rotor head, a cylinder enclosing the rotor shaft and control pushrods, and a wedge-shaped afterbody which gave the cylinder a sharp trailing edge. The ellipsoidal shell was mounted to the rotor blades outboard of the flap-lag hinges so that it would follow the largest blade motions-coning, average lag, and first harmonic flapping. This minimized the size of the cutout holes necessary to accommodate the motions of the rotor blades. The cylinder enclosing the rotor shaft and pushrods, was mounted to the fuselage shell and was provided with air ejection boundary layer control slots located at the point of maximum thickness. It should be noted that because the cylinder was attached to the fuselage, rotor force measurements taken with this configuration do not include forces on the cylinder. The ellipsoidal shell rotated around the cylinder, and the sliding joint was sealed with felt. A wedge-shaped afterbody was mounted on the aft end of the cylinder and was segmented and spring loaded to stay in contact with the ellipsoidal shell. A felt seal was used between the wedge-shaped afterbody and the ellipsoidal shell. In operation, the boundary layer control jets were intended to prevent flow separation over the wedge-shaped afterbody. This technique has been used successfully on a full-scale model and will be discussed further under "Discussion of Results".

The model was tested with rotor blades attached to the basic rotor head and to the rotor head with ellipsoidal fairing. As mentioned before, the model with the cap fairing was not tested with rotor blades. The test configurations are summarized in Table II.

Wake Survey Rake

The wake survey rake measured total head pressures at 112 stations and flow directions at 9 stations in a 9-square-foot area. Figure 6 shows the wake survey rake with the pressure probe locations. The total head pressure probes were of the shrouded, or Kiel type. The flow direction meters were United Sensor five-holed probes.

Before the test program was conducted, the wake survey rake was calibrated in the 4-by-6-foot Pilot Wind Tunnel at the United Aircraft Research Laboratories. The shrouded total pressure taps were found to be insensitive to incoming flow directions of up to $\pm$ 25 degrees.

The pressures to be surveyed were monitored by four 48-port scanning type pressure valves. Each pressure valve was equipped with a 2.5-psi differential pressure transducer. The entire pressure valve module was mounted inside the rear model extension that supported the wake survey rake.

PRESENTATION OF DATA

Wake Survey Data

All of the wake survey data obtained in the test, including the data
obtained with rotor blades, are presented in tabular form in Appendix II.
These tables list the pressure coefficient measured by each of the 112
total pressure probes and the flow direction measured by each of the 9 flow
direction meters. The numbers are arranged so that their locations in the
table correspond to the locations of the measuring probes given in Figure
6.

Flow directions are indicated at nine locations by the values within
boxes. The topmost number in each box is vertical flow displacement in
degrees (positive for upwash), and the bottom number is horizontal flow
displacement in degrees (positive for flow from left to right looking aft).
These flow directions are measured with respect to the wake survey rake
which is rigidly attached to the tail of the model. Therefore, to obtain
upwash or sidewash angles with respect to the wind tunnel axis, the fuse-
lage pitch and yaw angles, given in each table, must be removed from the
tabulated flow direction:

Upwash = ε = Vertical flow displacement - α_f.

Sidewash = σ' = Horizontal flow displacement + ψ.

Total pressures are listed in the table as pressure coefficients,
defined as $C_p = (P_T - P_S)/q$. Pressure coefficient is related to fluid
speed as shown in Figure 7. The dynamic pressures and velocities given at
the top of each table are the actual values obtained in the wind tunnel,
not the simulated values.

A selected portion of the wake survey data obtained without rotor
blades is presented in graphical form to permit visualization of the wake
and to illustrate the effects observed in this test. Figure 8 is an ex-
ample of this. These wake survey figures show, within the bounds of the
wake survey rake, lines of constant pressure coefficient and arrows which
indicate upwash and sidewash as seen by an observer looking downstream.

Flow direction arrows are formed by the vector addition of upwash and
sidewash arrows. The "tail" of each arrow is located at the measurement
point. The scale of these arrows, shown on each figure, is degrees, which
for the small angles being dealt with is proportional to velocity. In some
cases, the measured angles were unusually large, so that flow direction
arrows would go off the figure. In these cases, the upwash and sidewash
angles are printed adjacent to the measurement point.

Rotor Performance Data

The rotor performance data obtained in this test are presented in
tabular form in Appendix III. Each table in this appendix presents all of
the data obtained for a particular configuration. The tables include the

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wind tunnel operating velocity, wind tunnel dynamic pressure, model
attitude, rotor cyclic pitch, collective pitch, and first harmonic longi-
tudinal and lateral flapping components, as well as rotor shaft force and
moment coefficient-solidity ratios. When the rotor blades were not
attached to the model, the force and moment coefficient-solidity ratios
were computed as if the blades were present. This was done to facilitate
comparison of the data. To obtain forces and moments from these data, the
following formulae can be used:

$$L = 12.72 \ (q/\mu^2) \ C_L/\sigma, \ \text{pounds}$$

$$D = 12.72 \ (q/\mu^2) \ C_D/\sigma, \ \text{pounds}$$

$$Y = 12.72 \ (q/\mu^2) \ C_Y/\sigma, \ \text{pounds}$$

$$Q = 57.26 \ (q/\mu^2) \ C_Q/\sigma, \ \text{foot-pounds}$$

$$PM = 57.26 \ (q/\mu^2) \ C_{PM}/\sigma, \ \text{foot-pounds}$$

$$RM = 57.26 \ (q/\mu^2) \ C_{RM}/\sigma, \ \text{foot-pounds}$$

Rotor Blade Moment and Flapping Data

The rotor blade moment and flapping data are presented in tabular
form in Appendix IV. These data are in the form of maximum and minimum
bending moment or flapping values measured during a particular test con-
dition. The blades were dynamically scaled so that a flapwise moment of
60 inch-pounds, a chordwise moment of 125 inch-pounds, and a torsional
moment of 85 inch-pounds would each correspond to a 10,000-psi stress in an
equivalent aluminum blade. The data are not presented in graphical form
because no variation in rotor blade stress or flapping with fuselage yaw
angle was observed, and because the data agree with similar data obtained
in Reference 8.

DISCUSSION OF RESULTS

The Effect of Fuselage Pitch on the Wake Characteristics

As fuselage pitch angle increases, the position of the wake remains relatively constant with respect to the streamwise projected fuselage profile, i.e., the wake trails directly downstream. This is shown in Figure 8 for the model with the basic rotor head attached but without rotor blades (configuration FH) at a simulated forward speed of 200 knots and at values of α_f between -8 and +8 degrees. The wake did, however, move up with respect to the tail of the helicopter. No consistent effects of fuselage pitch angle on the shape of the wake were observed. It is believed that the nonsteady nature of the wake makes an accurate definition of the average wake impossible using the data obtained in this test which represent the instantaneous pressures in the wake.

The Effect of Fuselage Yaw on the Wake Characteristics

Yawing the model in either direction causes the wake to shift with respect to the tail so as to remain behind the streamwise projected profile. This is shown in Figure 9 for the model with the basic rotor head (configuration FH) at a simulated forward speed of 200 knots and at values of ψ between -8 and +8 degrees. Examination of the flow directions measured by the upper row of flow direction probes indicates that the downwash is greater on the downstream side of the model than on the undisturbed side. Again, no consistent effects on the shape of the wake were observed.

The Effect of Rotor Head Configuration on the Wake

Adding the basic rotor head to the model increases the size of the wake compared to the bare shaft (configuration F) case. Adding the cap fairing to the basic rotor head (configuration FH) further increases the wake size (this will be discussed in more detail in the next section). However, no change in the shape or the location of the wake was noticed which would indicate why the cap fairing has been effective in flight operation in reducing tail shake. A better understanding of the mechanism of this improvement might be obtained from examination of dynamic measurements of the turbulence in the wake. Adding the ellipsoidal fairing to the configuration FH causes the wake to increase in size slightly. These effects are shown in Figure 10 for the model in an unpitched, unyawed attitude, and in Figure 11 for the model in an attitude which is typical of normal helicopter flight, i.e. nose down and to the left (negative α_f, negative ψ). Data for these figures were taken at a simulated forward speed of 200 knots.

The Effect of Rotor Head Configuration and
Fuselage Angle of Attack on Rotor Head Drag

The parasite drag of the rotor head increases slightly with increasing fuselage angle of attack. This is illustrated in Figure 12 for a simulated forward speed of 200 knots. This figure also shows that the addition of

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the cap fairing increases the drag of the basic rotor head by about 0.03 square foot (12 percent), and that the addition of the ellipsoidal fairing increases the drag of the basic rotor head by about 0.02 square foot (8 percent).

The drag measurements for the ellipsoidal fairing did not include the drag of the cylinder enclosing the rotor shaft and pushrods (this was discussed in the description of the model configurations), and none of the drag measurements included possible interference drag effects. In order to provide an indication of the total drag, the area enclosed by the $C_p = 0.9$ contour was measured for all of the conditions shown in Figures 10 and 11. Fluid passing through a $C_p = 0.9$ contour has lost momentum; therefore, a large enclosed area connotes a large drag. These areas are presented in Table III in square feet and as a percentage of the area for the basic rotor head. The area within the $C_p = 0.9$ contour is approximately proportional to the total drag of the rotor head and fuselage and includes any interferences between these components. The results show the same trends that are shown in Figure 12: the ellipsoidal fairing (configuration FHf) has less drag than the cap fairing (configuration FHC), and, for zero fuselage angle of attack, both configurations have higher drag than the basic rotor head. The small area enclosed by the $C_p = 0.9$ contour for configuration FHf at -4 degrees fuselage angle of attack is not reflected by a corresponding reduction in the drag measured at the same attitude. This is probably due to a reduction in the interference drag between the pylon and the ellipsoidal fairing, which would not be reflected in the drag measured at the rotor head but which would decrease the momentum loss in the wake and therefore decrease the area enclosed by the $C_p = 0.9$ contour. No attempt has been made to integrate the wake survey data to obtain total drag because of the unknown effects of the model mounting struts, and because the wake is not fully enclosed by the wake survey rake.

The Effect of Boundary Layer Control Jet Pressure Ratio on the Drag and Wake Characteristics of a Full-Scale Ellipsoidal Rotor Head Fairing

As previously mentioned, the model boundary layer control jet pressure ratio was not sufficient to prevent flow separation over the wedge-shaped afterbody. This was determined from observing tufts attached to the cylinder and afterbody. Large pressure losses in the ducts connecting the high-pressure source to the boundary layer control system caused this inadequacy. However, full-scale tests of an ellipsoidal rotor head fairing mounted on a modified SH-3A pylon, Figure 13, were conducted by Sikorsky Aircraft in 1960 in the United Aircraft Corporation 18-foot Main Wind Tunnel. The test model is described in more detail in Reference 1. Wake survey data were taken during this test using a wake survey rake located 38 feet downstream of the center of the rotor head, which is the approximate distance between the rotor head and the tail rotor of the SH-3A. Since this test was full scale, the actual tunnel speed V, and not a simulated forward speed, will be referred to in the discussions. The results presented here were obtained at a forward speed of 105 knots, an effective advance ratio, μ^*, of 0.27, and at zero angle of attack.

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This full scale test demonstrated that significant reductions in drag and wake size could be obtained with sufficient boundary layer control jet pressure. Figure 14 presents some of the wake survey data that were obtained in this test. The size of the wake decreased with increasing boundary layer control jet pressure ratio, defined as $(P_J - P_S)/q$, until a jet pressure ratio of about 7.7 was attained. Beyond this point, increasing jet pressure ratio caused no reduction in wake size, indicating that separation had been minimized.

The parasite area, f, of the full-scale model is plotted against boundary layer control jet pressure ratio in Figure 15. Due to jet reaction, the measured drag of the full-scale model decreased as the boundary layer control jet pressure ratio was increased beyond 7.7. This is shown by the lower curve of Figure 15. There was, however, an optimum operating jet pressure ratio where the total equivalent drag, which includes form drag and the drag equivalent of the power required to operate the boundary layer control jets (assuming 75 percent efficient pumps), was a minimum. The upper curve of Figure 15 shows that this optimum point was reached at a jet pressure ratio of about 7.7.

The Effect of Fuselage Angle of Attack on Average Upwash

Increasing fuselage angle of attack has no discrete effect on the average upwash. Figure 16 presents the average upwash versus fuselage angle of attack for each of the four basic configurations tested at various yaw angles. Included in this figure are comparative data obtained from a floating tail flow direction meter which was tested previously on the model, Reference 8. The upwash angle remains essentially constant at minus one degree for all configurations except the ellipsoidal fairing. Upwash increased with angle of attack for this configuration. The rotor head lift data for this configuration do not indicate any significant decrease in lift with angle of attack which might explain this.

The Effect of Fuselage Yaw on Rotor Performance

The effect of fuselage yaw on rotor performance for three forward speed-advance ratio combinations is shown in Figures 17, 18, and 19. Included in Figures 17 and 18 are comparative data obtained from Reference 8 shown as dashed lines. Drag and torque data for the 250-knot simulated forward speed case are not presented in Figure 19 because very little variation in these parameters was observed. Rotor lift, drag, and torque were found to be essentially unaffected by fuselage yaw.

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CONCLUSIONS

As a result of the tests described in this report, the following
conclusions have been drawn:

1. Helicopter fuselage yaw angle has no significant effect
   upon rotor lift, drag, or torque characteristics for the
   configuration tested.

2. The wake survey pressure data obtained for the model with
   rotor blades was not regular or consistent, and no discernable
   trends have been observed in these data. The following con-
   clusions are based on wake survey data obtained without rotor
   blades.

3. The wake of the helicopter tends to remain directly downstream
   of the helicopter rotor head for the angles of pitch and yaw
   that were investigated (i.e., angles between +8 and -8 degrees).

4. The ellipsoidal rotor head fairing used in this test resulted
   in an 8 percent increase in rotor head drag over the basic
   rotor head and increased the area of the wake slightly. However,
   this type of fairing, when used with an effective blowing
   boundary layer control system, may provide significant reductions
   in drag and wake size.

5. The "cap" rotor head fairing used in this test resulted in a 12
   percent increase in rotor head drag over the basic rotor head and
   increased the size of the wake slightly. The data obtained in
   this test gave no indication of why this fairing is effective in
   eliminating tail shake.

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APPENDIX I
DESCRIPTION OF THE WIND TUNNEL, EXPERIMENTAL PROCEDURE,
DATA ACQUISITION SYSTEM, AND DATA ACCURACY AND REPEATABILITY

Wind Tunnel

The 18-foot Main Wind Tunnel at the United Aircraft Research Laboratories is a closed-throat, single-return wind tunnel capable of speeds up to approximately 175 knots. An artist's sketch of this tunnel is shown in Figure 20. The test section is octagonal in cross section. The tunnel stagnation temperature is held approximately constant by variable-opening air exchangers. Stagnation pressure is atmospheric and is constant throughout the test section in the absence of externally caused momentum losses.

All tunnel controls and data acquisition equipment are located in a control room adjacent to the tunnel test section. Windows permit constant observation of the model from the control room.

Experimental Procedure

At the beginning of each run, the rotor shaft speed and the wind tunnel speed were set to one of the shaft speed-tunnel speed combinations listed in Table I. This was done whether or not the model was being tested with blades to include any possible effects due to rotor head rotation. Then the fuselage pitch and yaw angles were varied. When the rotor blades were attached, the rotor controls were set to produce zero first harmonic lateral flapping and the desired first harmonic longitudinal flapping.

The wake survey data and the rotor performance data were obtained simultaneously whenever possible. However, due to data system malfunctions, some of the runs had to be repeated to obtain the rotor performance data. Table IV summarizes the data runs.

Data Acquisition System

The rotor balance data were recorded manually from Baldwin SR-4 Precision Indicators (Type L-5D). The data were then processed and tabulated by a UNIVAC 1108 digital computer. All rotor balance data have been corrected for force variations due to gravity, and corrections have been applied to the data to compensate for wind tunnel blockage and wall effects, using the methods of References 9 and 10. The blockage correction to velocity was less than 2 percent of the wind tunnel velocity; the wall correction to angle of attack was less than 0.5 degree. All rotor forces and moments taken with the rotor blades are presented with the rotor head lift and drag forces removed.

The pressure data from the wake survey rake were transmitted directly to the United Aircraft Research Laboratories' Static Data Acquisition System (STADAS II), which punched the data on paper tape. Model attitude, dynamic pressure, total head pressure, and various other constants were

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entered into the STADAS II facility through a manual input board. The paper tape from STADAS II was converted to magnetic tape, which was then reduced utilizing a UNIVAC 1108.

The rotor blade stress and flapping motion data were recorded by an Ampex AR 200 F.M. magnetic tape recorder. These data were transferred to an oscillograph record, from which the maximum and minimum moment and flapping values were obtained. These moment and flapping data are presented in Appendix IV.

Data Accuracy and Repeatability

The repeatability of the rotor force data is indicated in Figure 21, which presents a comparison of data obtained in this test and in the similar tests described in Reference 8. The rotor force data are estimated to be accurate to within 5 percent of the maximum reading.

As mentioned before, the wake survey data were not consistent when the model was equipped with rotor blades. It is believed that either the nonsteady nature of the wake or vibration-induced errors in the pressure transducers caused the lack of consistency in the data. The estimated accuracy of the wake survey data obtained when the model was operating without rotor blades is as follows:

Error in Pressure Coefficient Expressed as
a Percentage of Maximum Reading

Simulated Forward Speed, V_s	Error
120 knots	$\pm$ 9.0 pct
200 knots	$\pm$ 3.5 pct
250 knots	$\pm$ 2.0 pct
300 knots	$\pm$ 1.5 pct

Error in the Horizontal and Vertical Flow Displacements

Simulated Forward Speed, V_s	Error
120 knots	$\pm$ 1.5 deg
200 knots	$\pm$ 0.7 deg
250 knots	$\pm$ 0.4 deg
300 knots	$\pm$ 0.3 deg

The rotor blade moment data are estimated to be accurate to within 2 inch-pounds. The rotor blade flapping motion data are estimated to be accurate to within 0.2 degree.

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WAKE SURVEY RAKE

ELLIPSOIDAL ROTOR HEAD FAIRING
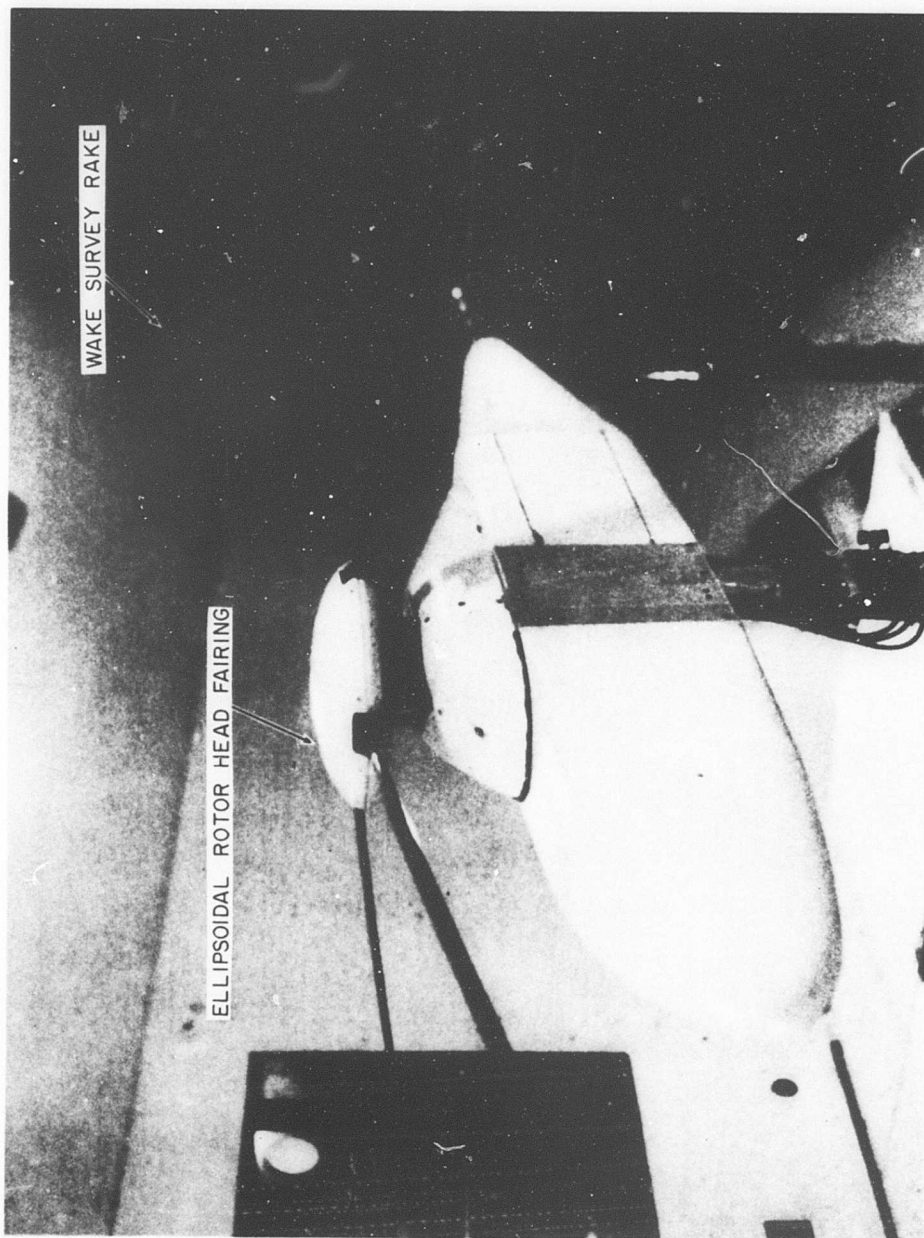
Figure 1. Sikorsky Aircraft Generalized Helicopter Model With Wake Survey Rake Installed.
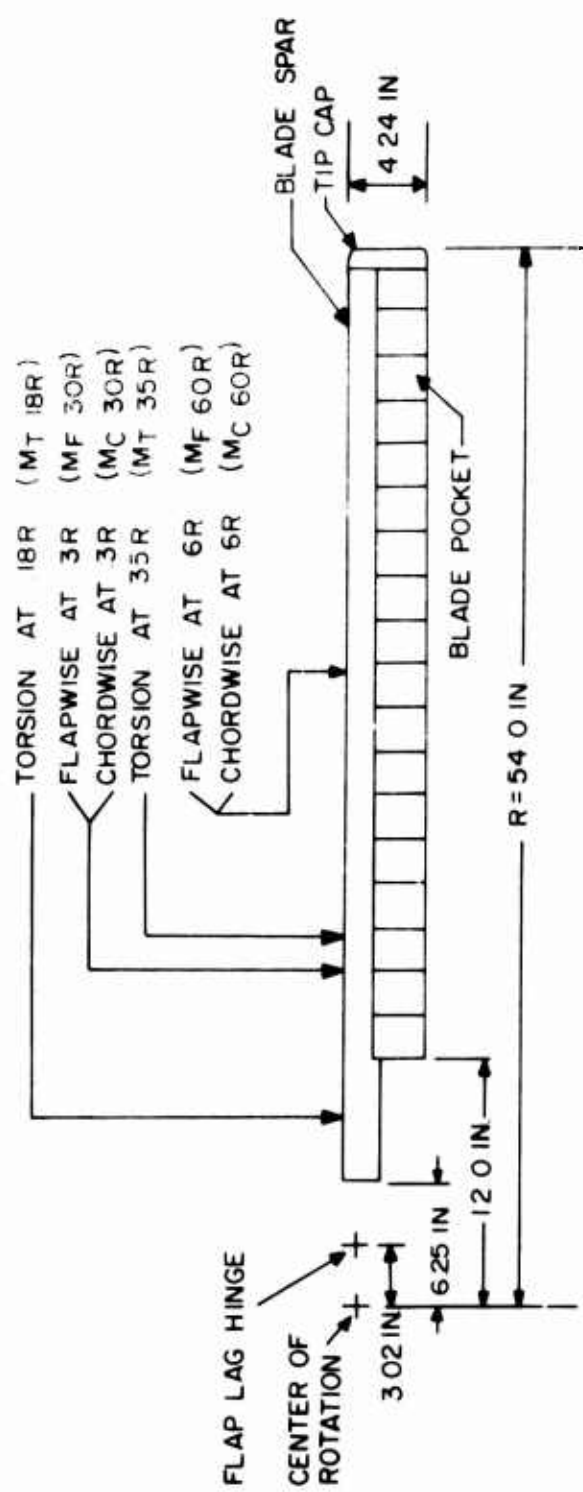
Figure 2. Rotor Blade Strain Gage Locations.

TORSION AT 18R (M_T 18R)
FLAPWISE AT 3R (M_F 30R)
CHORDWISE AT 3R (M_C 30R)
TORSION AT 35R (M_T 35R)
FLAPWISE AT 6R (M_F 60R)
CHORDWISE AT 6R (M_C 60R)

BLADE SPAR
TIP CAP
4 24 IN

BLADE POCKET

R=54 0 IN

FLAP LAG HINGE
CENTER OF ROTATION

3 02 IN
6.25 IN
12 0 IN

15
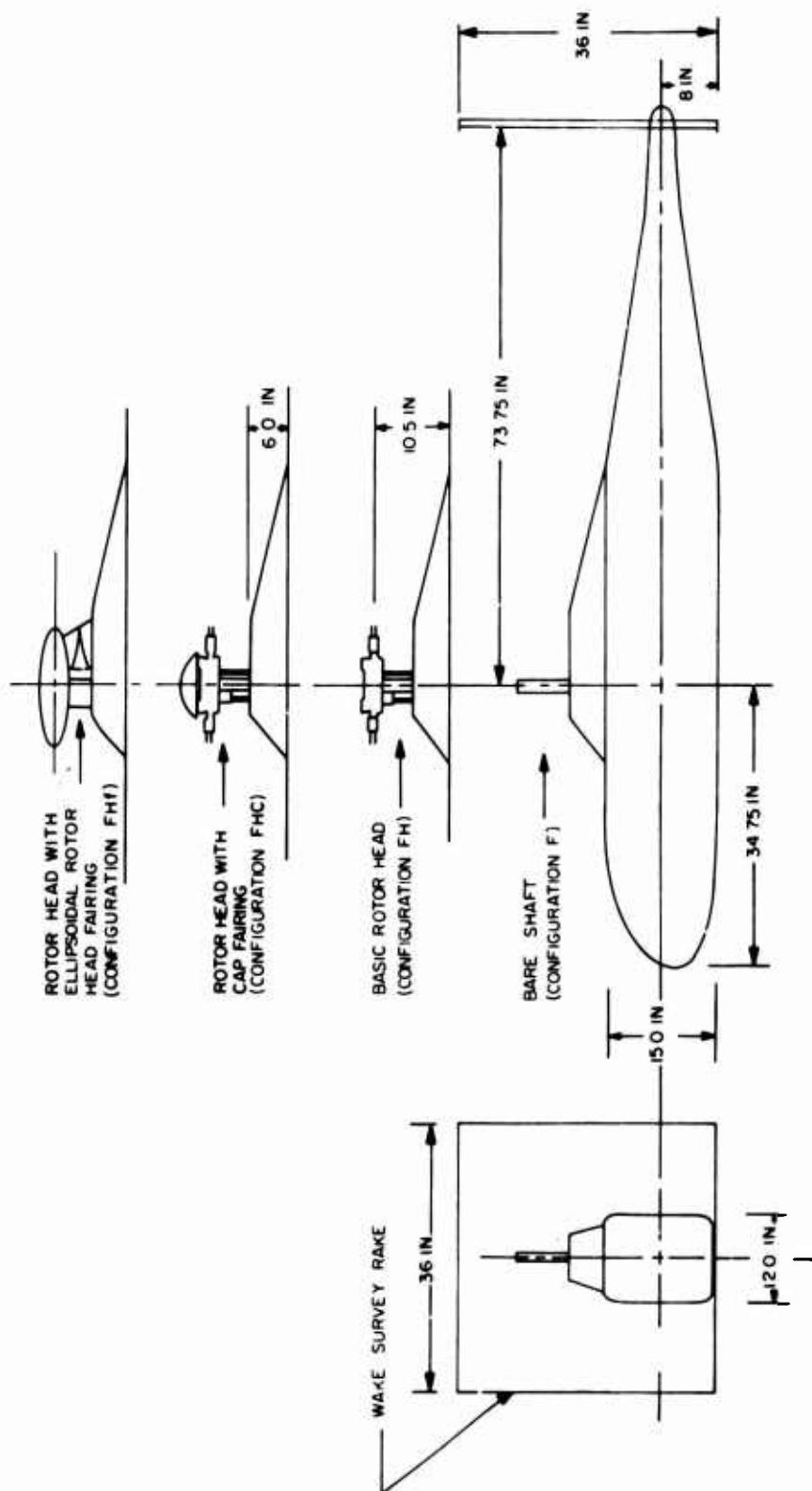
Figure 3. Configurations Tested.

ROTOR HEAD WITH ELLIPSOIDAL ROTOR HEAD FAIRING (CONFIGURATION FHf)

ROTOR HEAD WITH CAP FAIRING (CONFIGURATION FHC)

6.0 IN

BASIC ROTOR HEAD (CONFIGURATION FH)

10.5 IN

BARE SHAFT (CONFIGURATION F)

73.75 IN

36 IN

8 IN

34.75 IN

15.0 IN

WAKE SURVEY RAKE

36 IN

12.0 IN

CAP FAIRING

FLOW
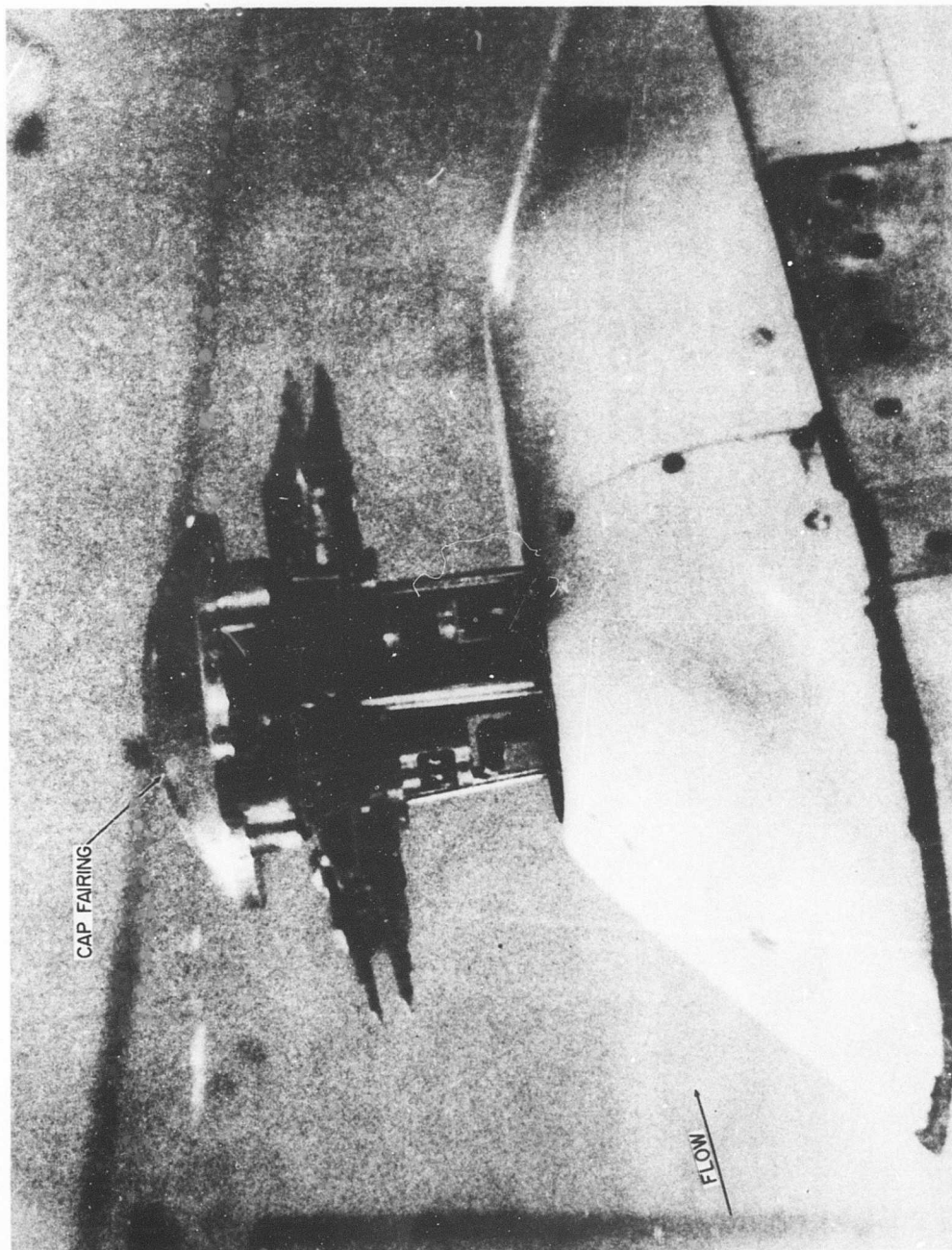
Figure 4. Rotor Head With the Cap Fairing (Configuration FHC).

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ELLIPSOIDAL ROTOR HEAD FAIRING

TELESCOPING AFTERBODY

AIR EJECTION BOUNDARY LAYER CONTROL JET SLOT

BOUNDARY LAYER CONTROL CYLINDER

FLOW
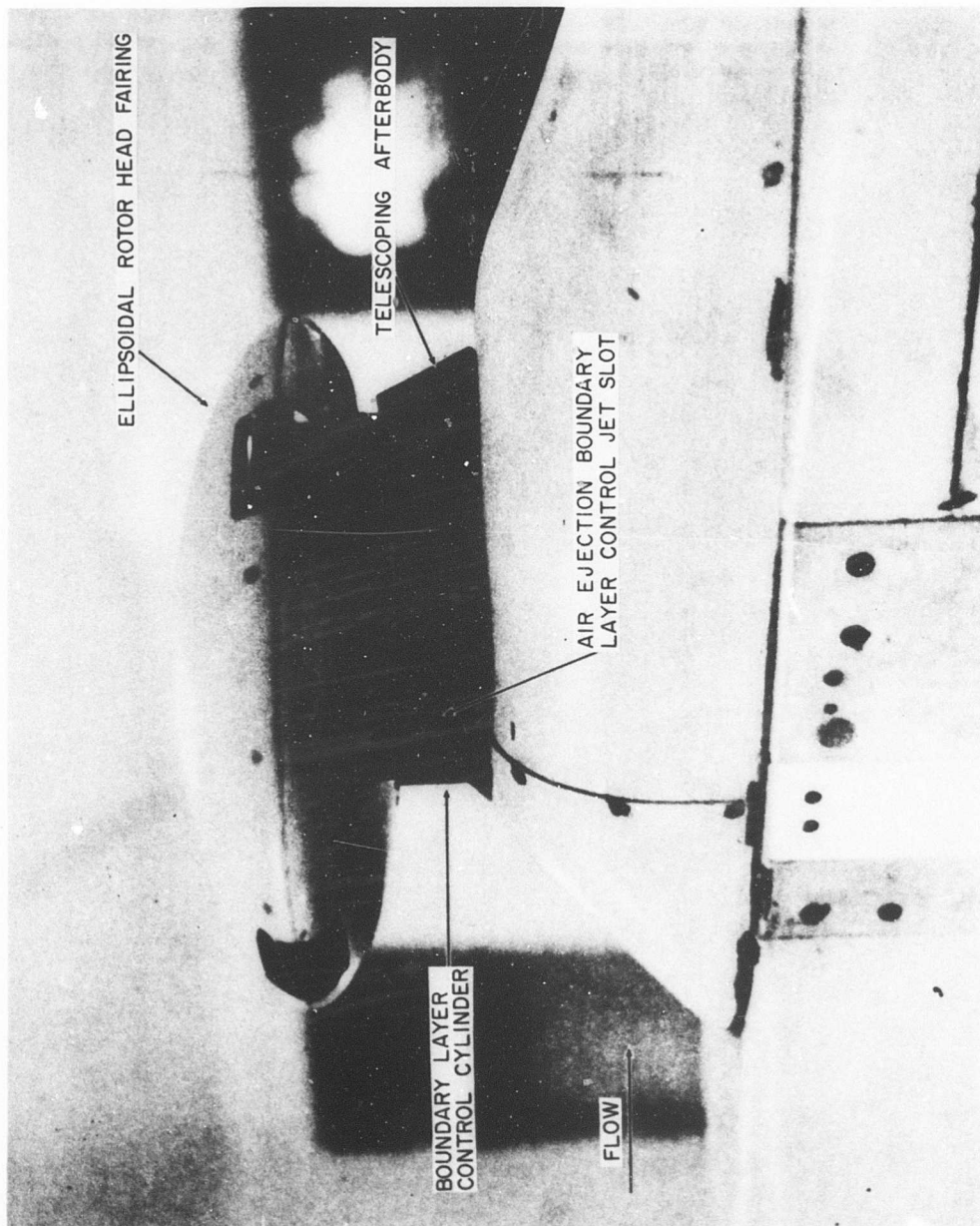
Figure 5. Rotor Head With the Ellipsoidal Fairing (Configuration FHf).

FIVE-HOLED FLOW DIRECTION PROBE
(NINE PROBES TOTAL)

TOTAL HEAD PRESSURE PROBE
(112 PROBES TOTAL)

FLOW

TRIGGERING
SOLENOID

SCANIVALVE

POSITION
TRANSMITTER

MODEL FUSELAGE

SIDE VIEW

20 IN

4 IN
(TYPICAL)

8 IN

2 IN (TYPICAL)

36 IN

36 IN

6¾ IN
TYPICAL

6¾ IN
TYPICAL

4½ IN
TYPICAL

9 IN
TYPICAL

FRONT VIEW
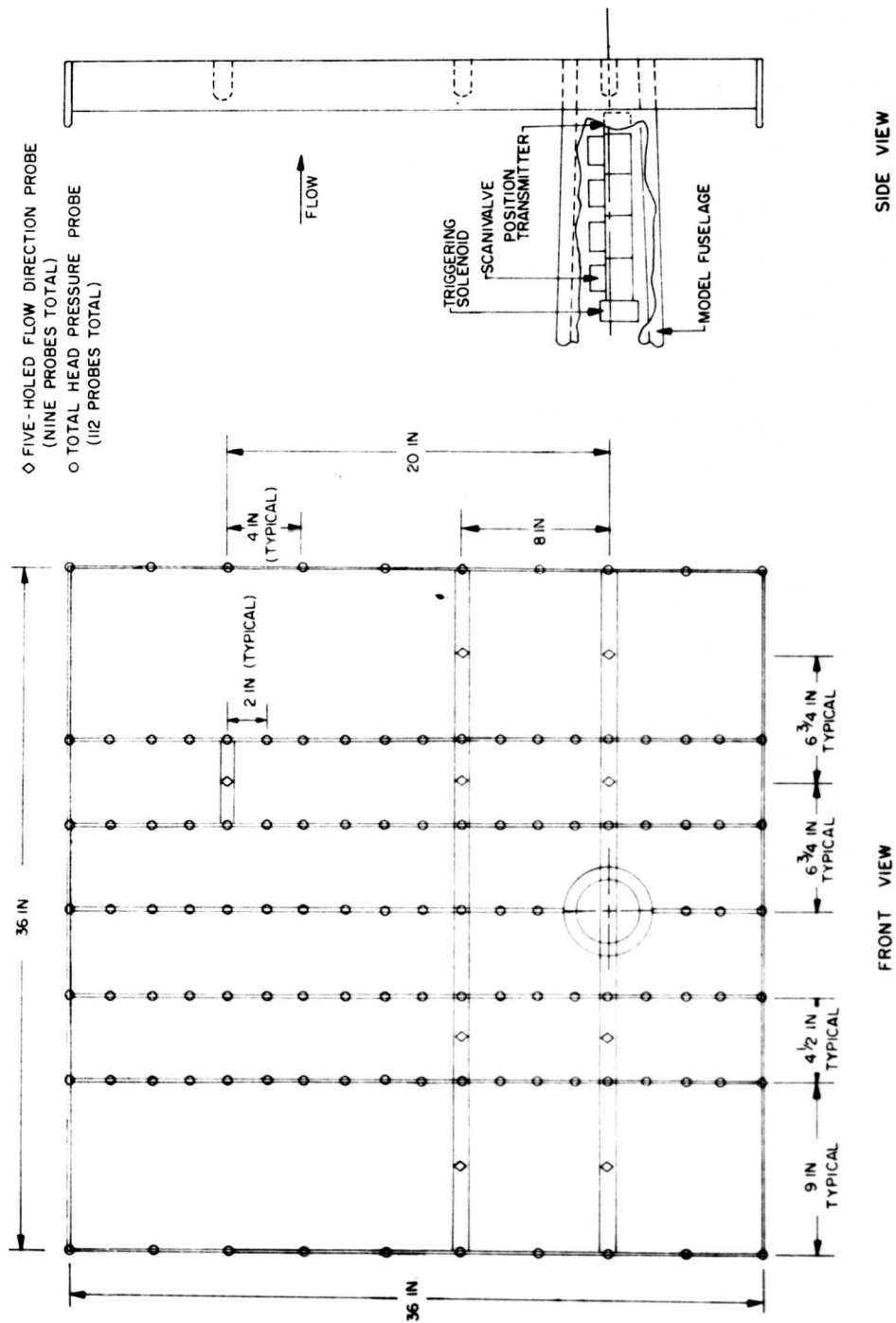
Figure 6. Schematic Drawing of the Wake Survey Rake.

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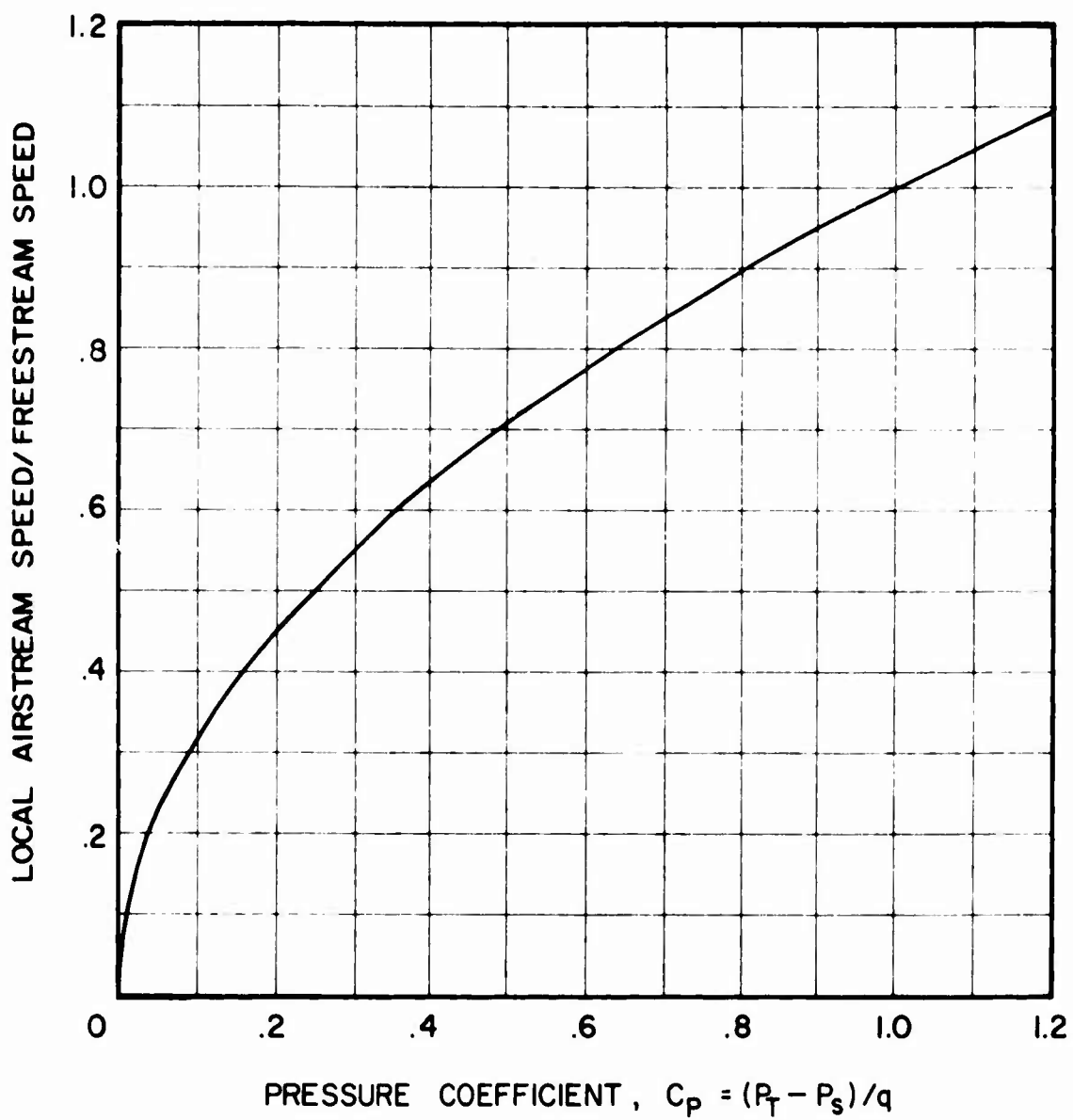
Figure 7.   Local Airstream Speed Ratio Versus Pressure
Coefficient.

20
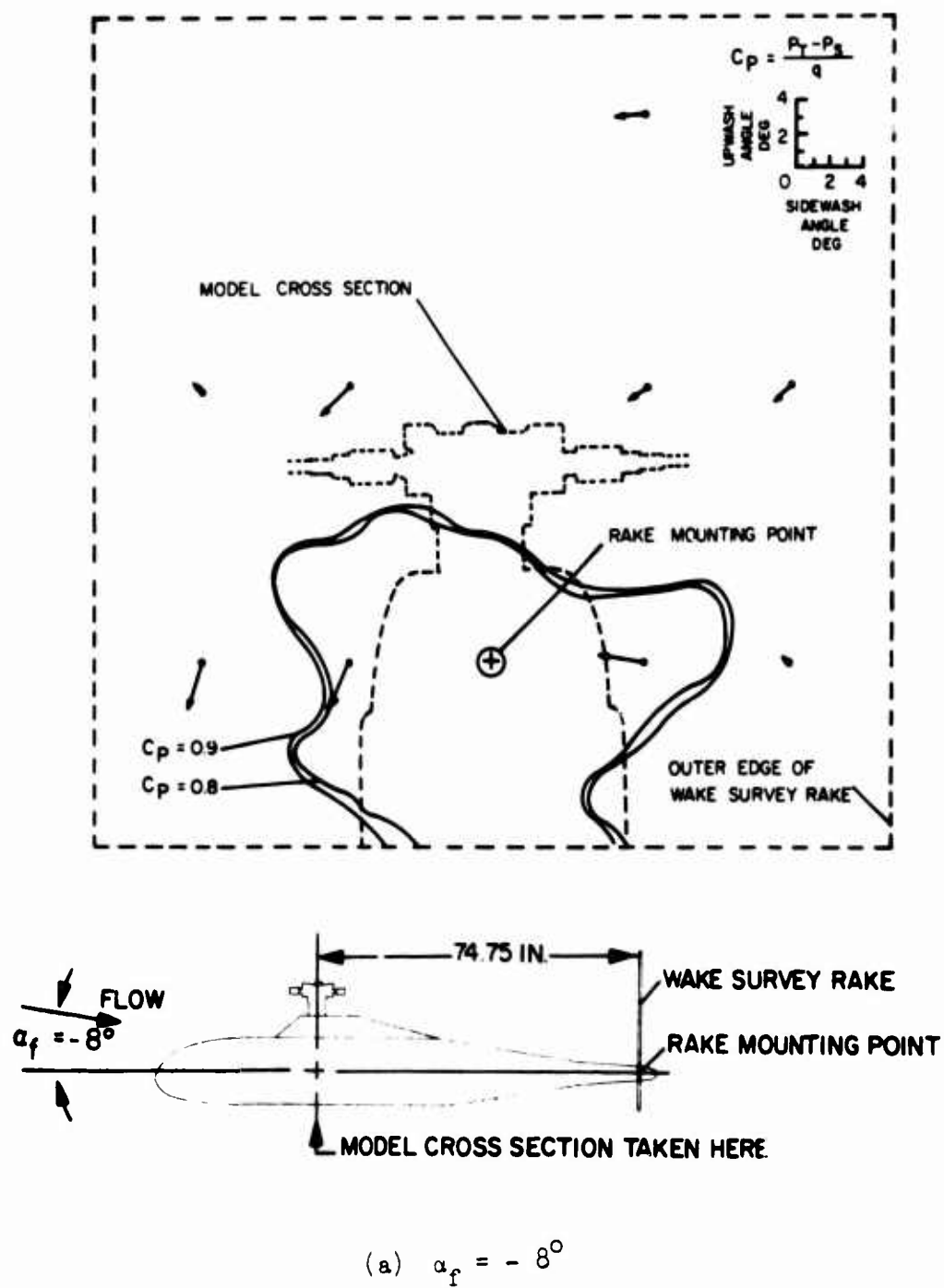
Figure 8. The Effect of Fuselage Angle of Attack on the Wake
of the Helicopter Model, V_S = 200 Knots, ψ = 0°,
μ^* = 0.5, Configuration FH.

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(b) $\alpha_f = -4°$

Figure 8. Continued

$$C_P = \frac{P_T - P_S}{q}$$

MODEL CROSS SECTION

$C_P = 0.9$

$C_P = 0.8$

OUTER EDGE OF
WAKE SURVEY RAKE

RAKE MOUNTING POINT

74.75 IN.

WAKE SURVEY RAKE

RAKE MOUNTING POINT

$\alpha_f = 0°$
FLOW

MODEL CROSS SECTION TAKEN HERE

(c) $\alpha_f = 0°$

Figure 8. Continued

MODEL CROSS SECTION

$C_P = \dfrac{P_T - P_S}{q}$

$C_P = 0.9$

$C_P = 0.8$

UPWASH
ANGLE
DEG

4

2

0   2   4

SIDEWASH
ANGLE
DEG

RAKE MOUNTING POINT

OUTER EDGE OF
WAKE SURVEY RAKE

74.75 IN.

WAKE SURVEY RAKE

FLOW

$\alpha_f = 4°$

RAKE MOUNTING POINT

MODEL CROSS SECTION TAKEN HERE

(d) $\alpha_f = 4°$

Figure 8 Continued.

24

MODEL CROSS SECTION

$$C_P = \frac{P_T - P_S}{q}$$

UPWASH ANGLE DEG

SIDEWASH ANGLE DEG

$C_P = 0.9$

$C_P = 0.8$

RAKE MOUNTING POINT

OUTER EDGE OF WAKE SURVEY RAKE

74.75 IN.

WAKE SURVEY RAKE

RAKE MOUNTING POINT

FLOW

$\alpha_f = 8°$

MODEL CROSS SECTION TAKEN HERE

(e) $\alpha_f = 8°$

Figure 8. Concluded

$$C_p = \frac{P_T - P_s}{q}$$

MODEL CROSS SECTION

$C_p = 09$

$C_p = 08$

RAKE MOUNTING POINT

OUTER EDGE OF
WAKE SURVEY RAKE

UPWASH ANGLE DEG

SIDEWASH ANGLE DEG

74.75 IN — WAKE SURVEY RAKE

RAKE MOUNTING POINT

$\alpha_f = 0°$

FLOW

MODEL CROSS SECTION TAKEN HERE

(a) $\psi = 9°$

Figure 9. The Effect of Fuselage Yaw Angle on the Wake of the
Helicopter Model, V_s = 200 Knots, $\alpha_f = 0°$,
$\mu^* = 0.5$, Configuration FH.

2c

MODEL CROSS SECTION

$$C_P = \frac{P_T - P_S}{q}$$

UPWASH ANGLE DEG

SIDEWASH ANGLE DEG

$C_P = 0.9$

$C_P = 0.8$

RAKE MOUNTING POINT

OUTER EDGE OF WAKE SURVEY RAKE

74.75 IN.

WAKE SURVEY RAKE

RAKE MOUNTING POINT

$\alpha_f = 0°$
FLOW

MODEL CROSS SECTION TAKEN HERE

(b) $\psi = 4°$

Figure 9. Continued

27

$$C_P = \frac{P_T - P_S}{q}$$

MODEL CROSS SECTION

$C_P = 0.9$

$C_P = 0.8$

OUTER EDGE OF
WAKE SURVEY RAKE

RAKE MOUNTING POINT

74.75 IN.

WAKE SURVEY RAKE

RAKE MOUNTING POINT

$\alpha_f = 0°$
FLOW

MODEL CROSS SECTION TAKEN HERE

(c) $\psi = 0°$

Figure 9. Continued

28

$$C_P = \frac{P_T - P_S}{q}$$

UPWASH ANGLE DEG

SIDEWASH ANGLE DEG

MODEL CROSS SECTION

$C_P = 0.9$

$C_P = 0.8$

RAKE MOUNTING POINT

OUTER EDGE OF WAKE SURVEY RAKE

74.75 IN.

WAKE SURVEY RAKE

RAKE MOUNTING POINT

$\alpha_f = 0°$

FLOW

MODEL CROSS SECTION TAKEN HERE

(d) $\psi = -4°$

Figue 9.   Continued

29

(e) $\psi = -8°$

Figure 9. Concluded

(a) Bare Shaft (Configuration F)

Figure 10. The Effect of Rotor Head Configuration In the Wake
of the Helicopter Model, V_s = 200 Knots, α_f = 0°,
ψ = 0°, μ^* = 0.5.

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$C_p = \dfrac{P_T - P_S}{q}$

MODEL CROSS SECTION

UPWASH ANGLE DEG

SIDEWASH ANGLE DEG

$C_p = 09$

$C_p = 08$

RAKE MOUNTING POINT

OUTER EDGE OF WAKE SURVEY RAKE

74.75 IN

WAKE SURVEY RAKE

RAKE MOUNTING POINT

$a_f = 0°$

FLOW

MODEL CROSS SECTION TAKEN HERE

(b) Basic Rotor Head (Configuration FH)

Figure 10. Continued
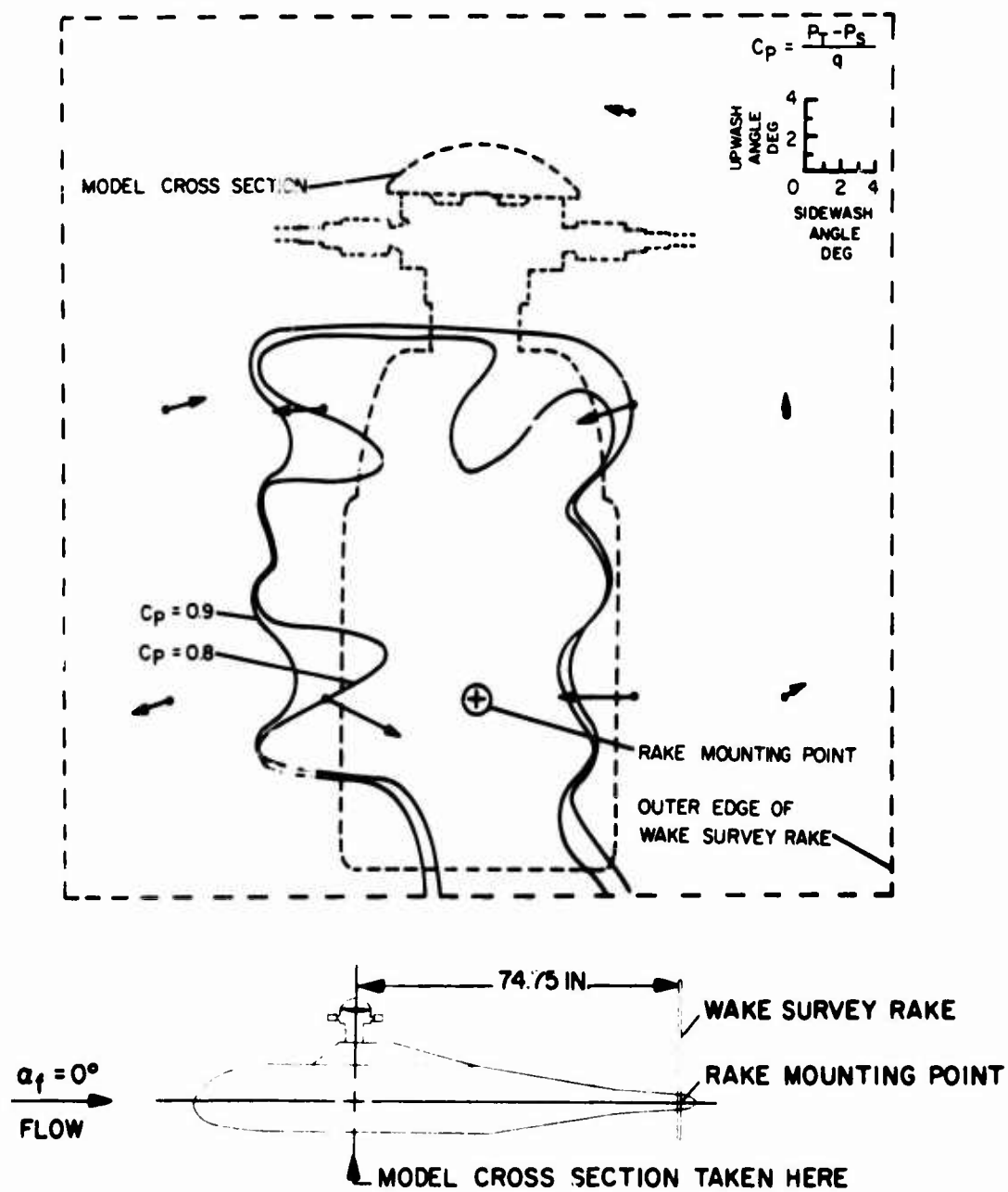
(c) Rotor Head With Cap Fairing (Configuration FHC)

Figure 10. Continued
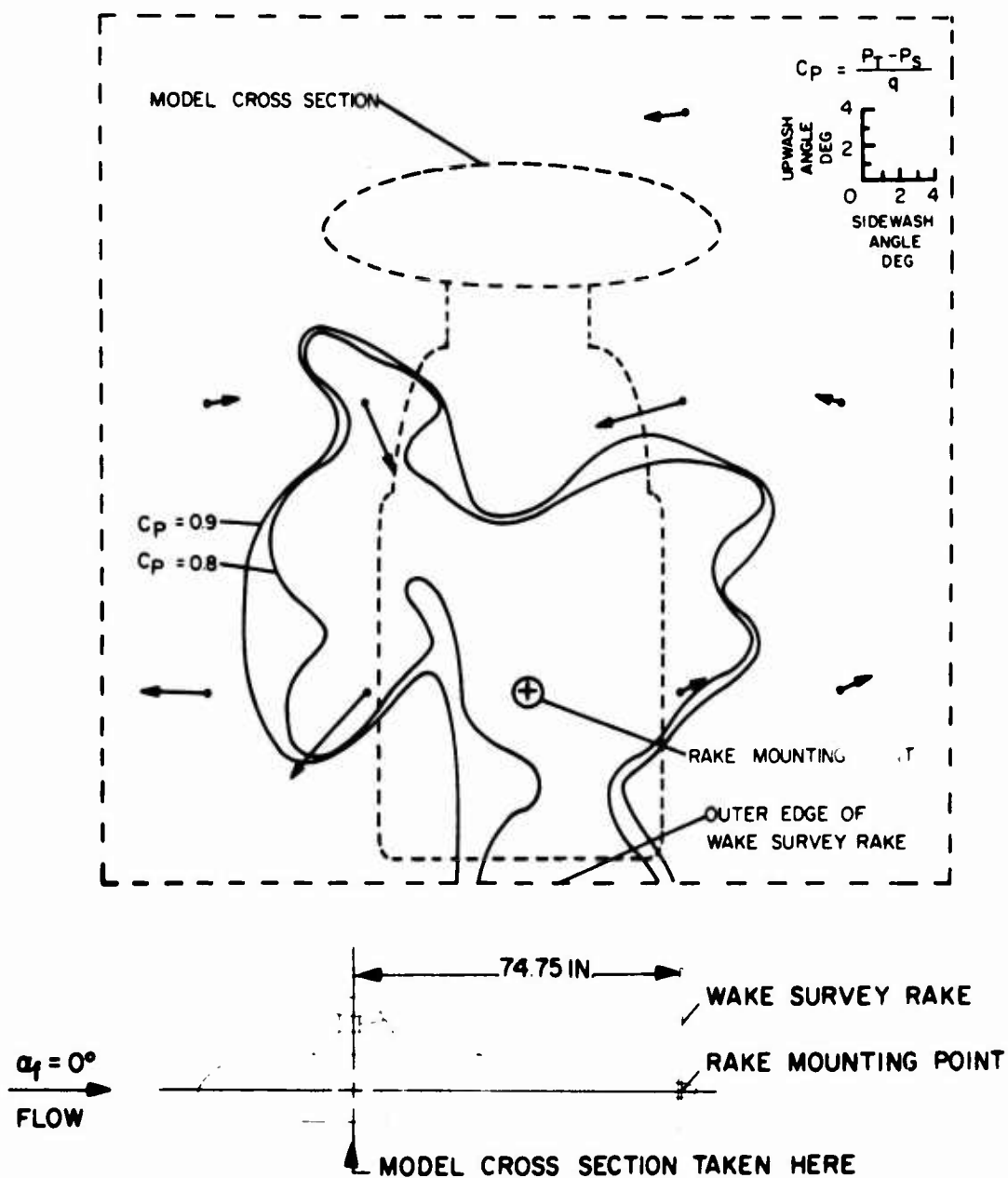
(d) Ellipsoidal Fairing (Configuration FHf)

Figure 10.   Concluded
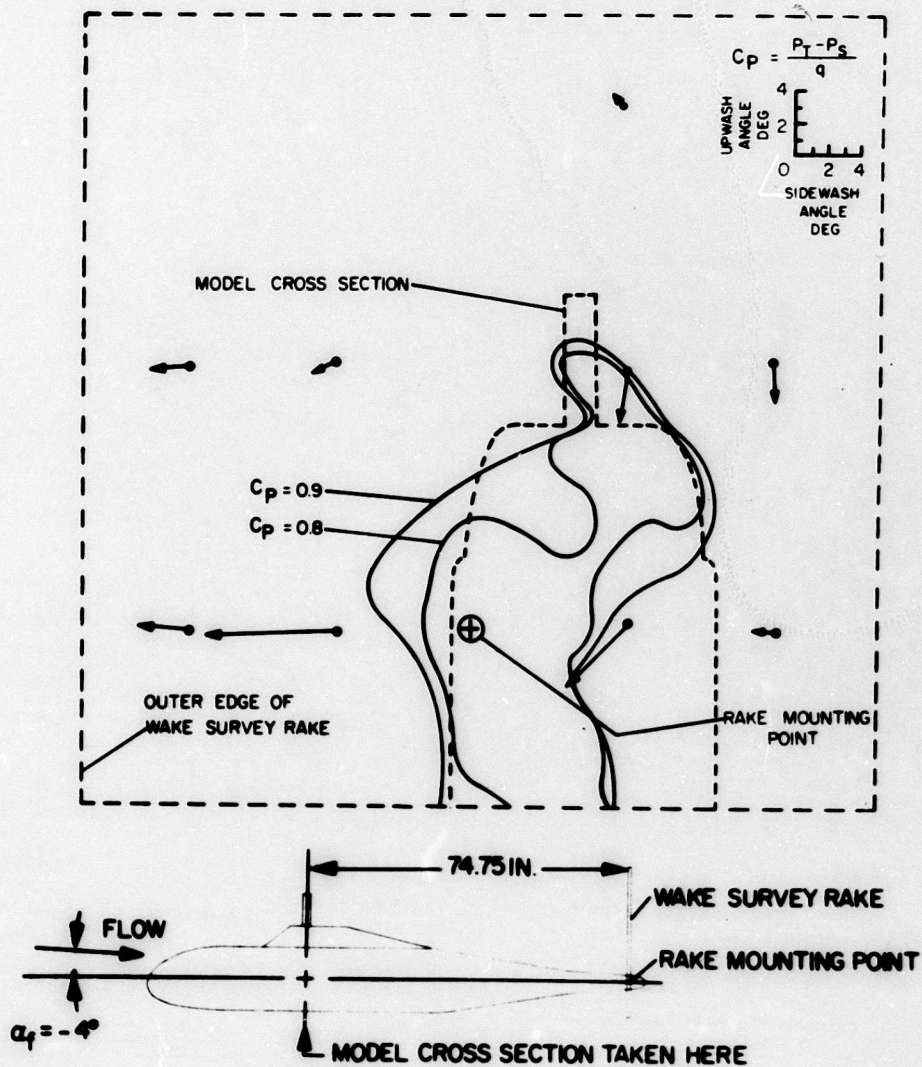
(a) Bare Shaft (Configuration F)

Figure 11. The Effect of Rotor Head Configuration on the Wake of the Helicopter Model, V_S = 200 Knots, α_f = - 4°, ψ = - 4°, μ^* = 0.5.
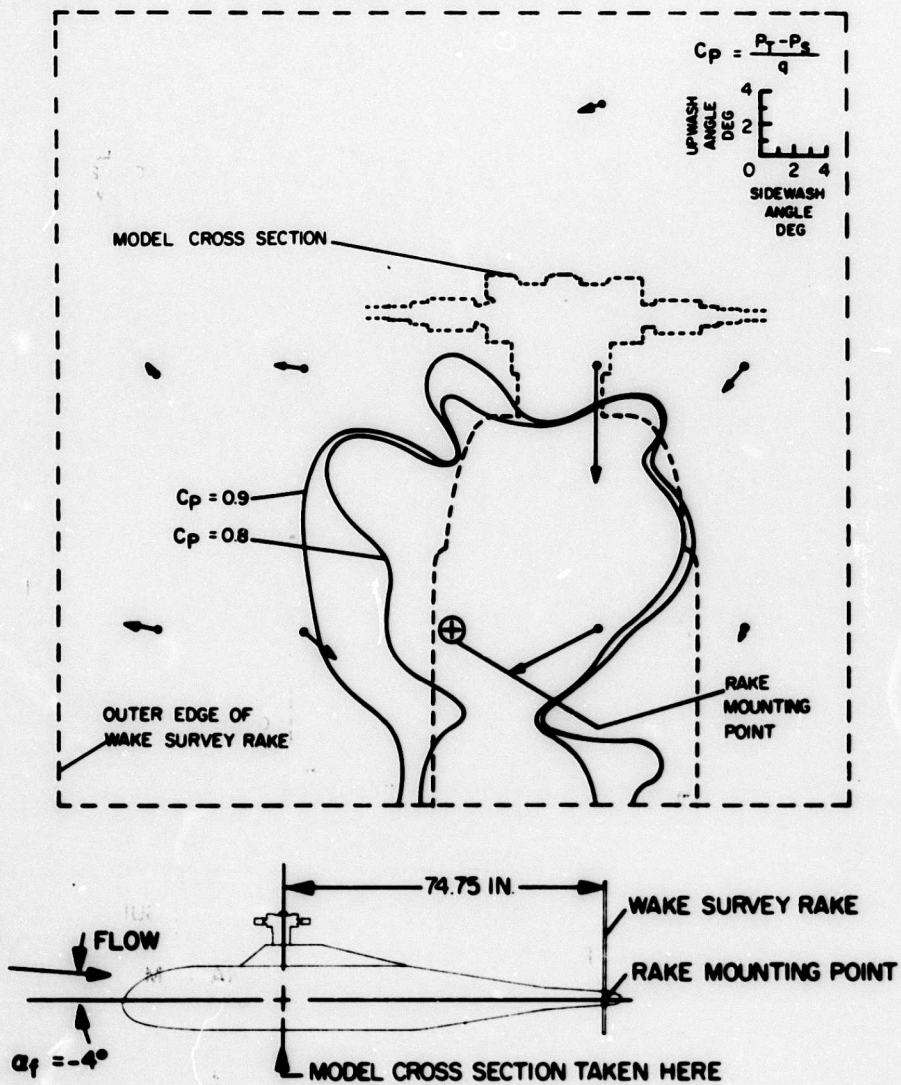
(b) Basic Rotor Head (Configuration FH)

Figure 11. Continued
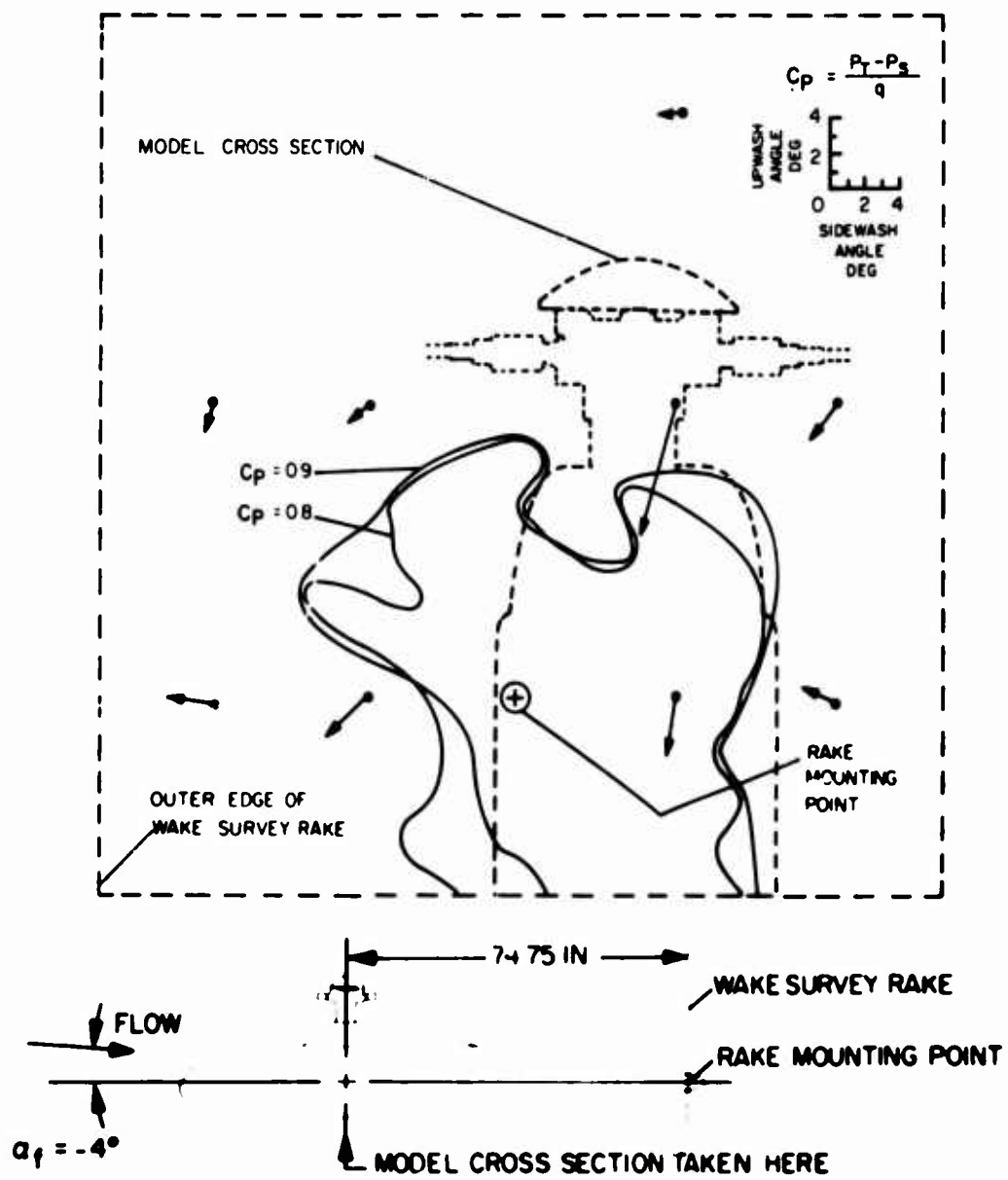
(c) Rotor Head with Cap Fairing (Configuration FHC)

Figure 11. Continued

37

$$C_p = \frac{P_T - P_S}{q}$$

MODEL CROSS SECTION

$C_p = 09$
$C_p = 08$

$\epsilon = 21.3°$
$\sigma = 1.0°$

OUTER EDGE OF
WAKE SURVEY RAKE

RAKE
MOUNTING
POINT

* DATA QUESTIONABLE

74.75 IN

FLOW

WAKE SURVEY RAKE

RAKE MOUNTING POINT

$\alpha_1 = -4°$

MODEL CROSS SECTION TAKEN HERE
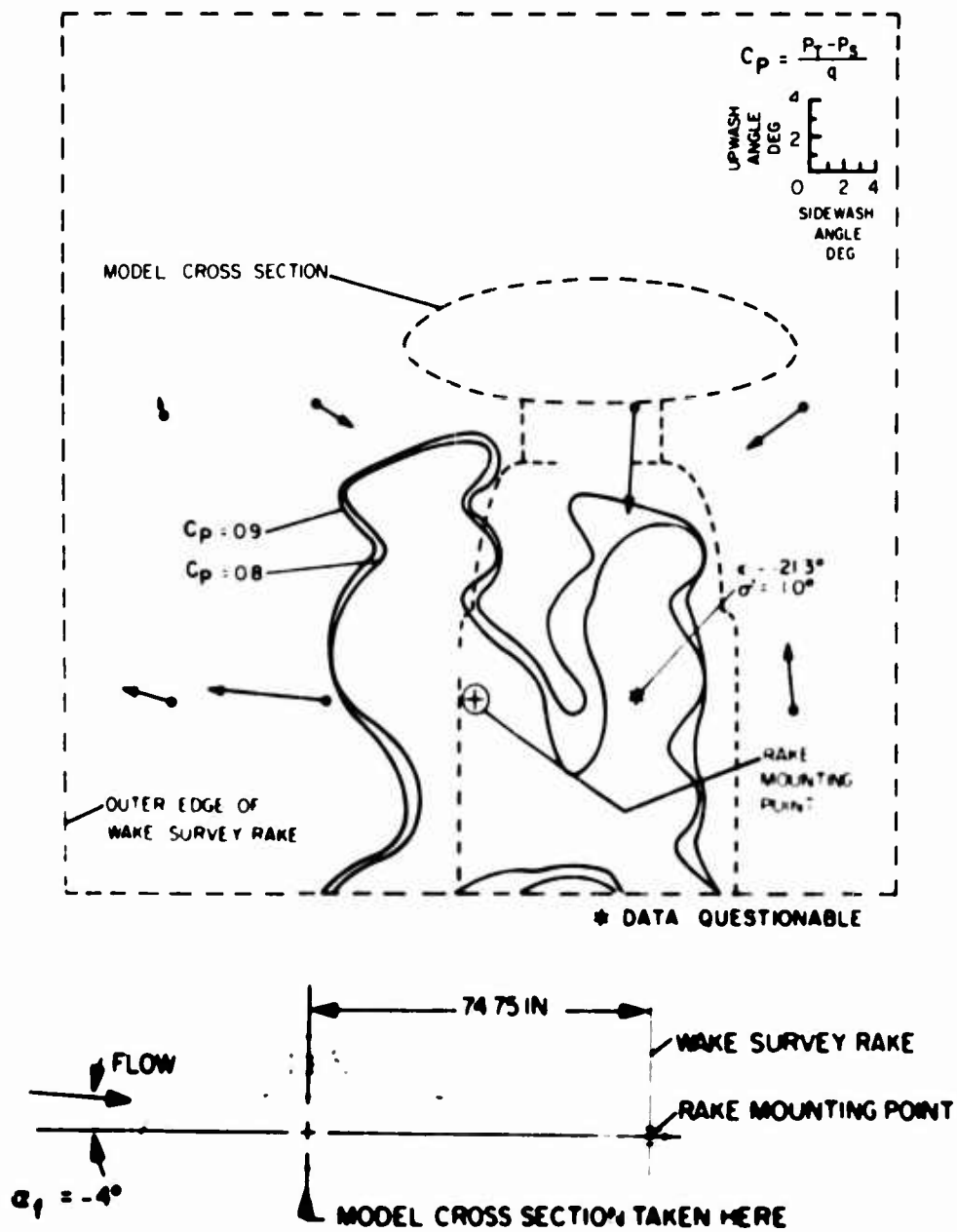
(d) Ellipsoidal Fairing (Configuration FHf)

Figure 11. Concluded

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Figure 12. A Comparison of the Drag Characteristics of Three
Rotor Head Configurations, V_S = 200 Knots,
ψ = 0, μ^* = 0.5.
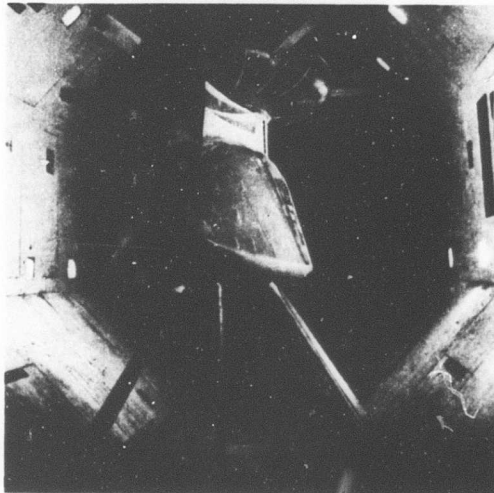
Rear View of Model
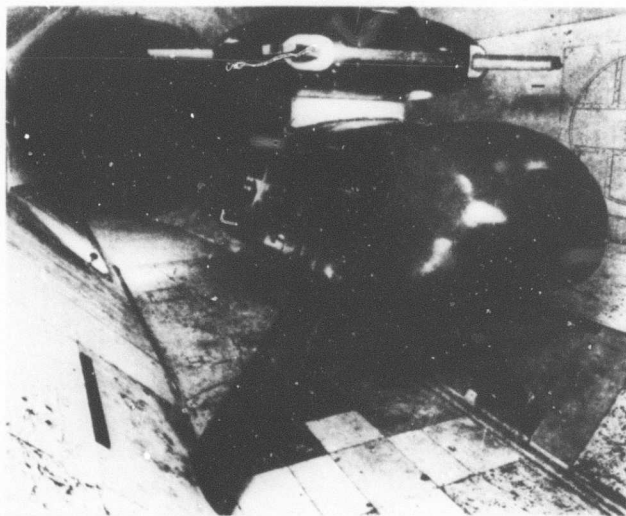
Front View of Model

Figure 13. Full-Scale Pylon-Ellipsoidal Rotor Head Fairing
            Installed in the United Aircraft Research
            Laboratories 18-Foot Main Wind Tunnel.
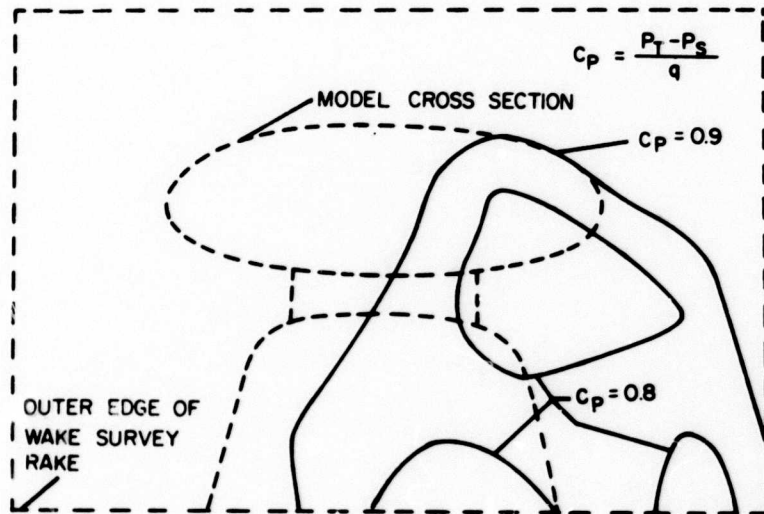
a. $\dfrac{P_J - P_S}{q} = 0$
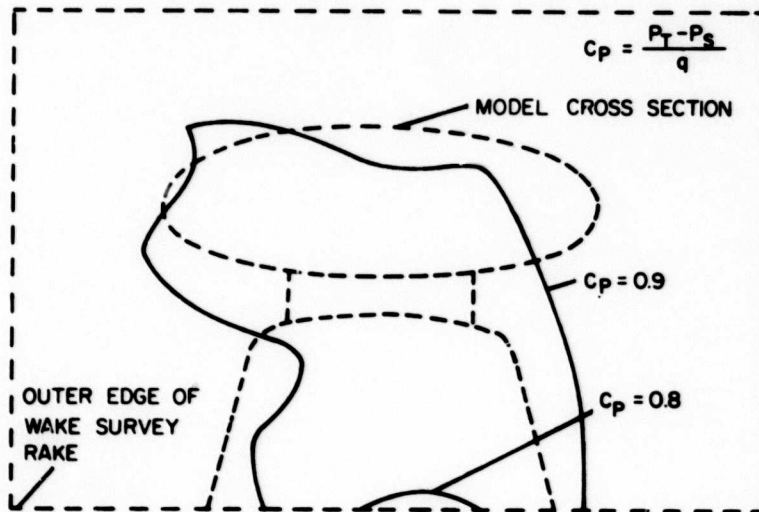
b. $\dfrac{P_J - P_S}{q} = 5.8$

Figure 14. The Effect of Increasing Boundary Layer Control Jet Pressure Ratio on the Wake 38 Feet Behind the Full-Scale Pylon-Ellipsoidal Rotor Head Fairing Model, V = 105 Knots, $\alpha_f = 0°$, $\mu^* = 0.27$.
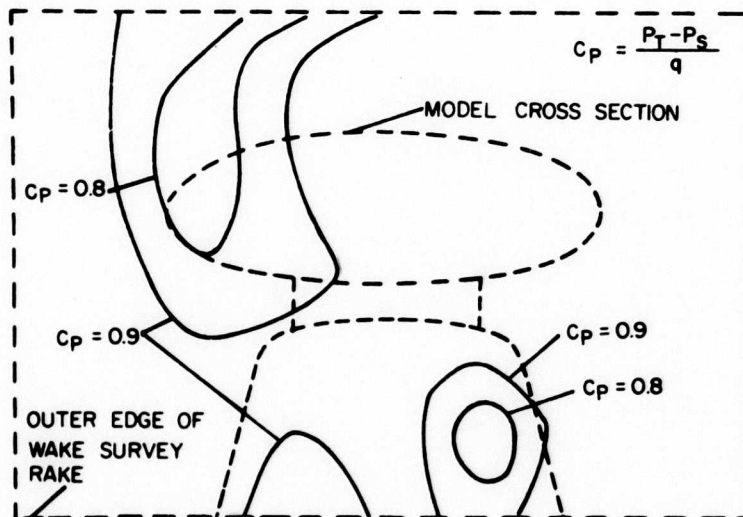
c. $\dfrac{P_J - P_S}{q} = 7.7$
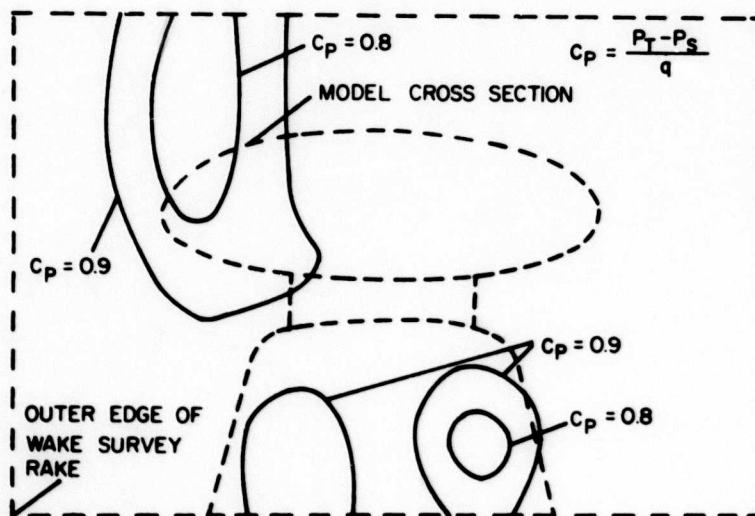
d. $\dfrac{P_J - P_S}{q} = 11.6$

Figure 14. Continued

42

$C_P = 0.8$

MODEL CROSS SECTION

$C_P = \dfrac{P_T - P_S}{q}$

$C_P = 0.9$

$C_P = 0.9$

$C_P = 0.8$

OUTER EDGE OF WAKE SURVEY RAKE

e. $\dfrac{P_J - P_S}{q} = 19.5$

Figure 14. Concluded

43
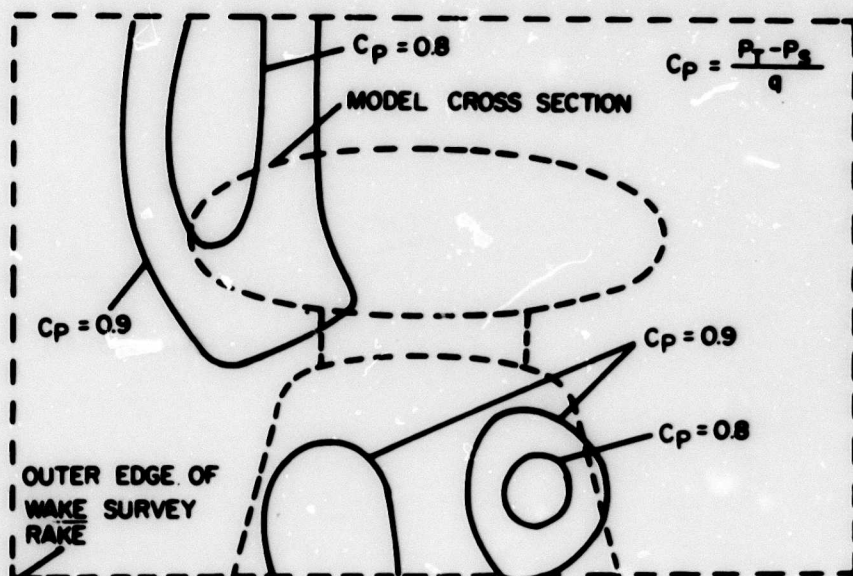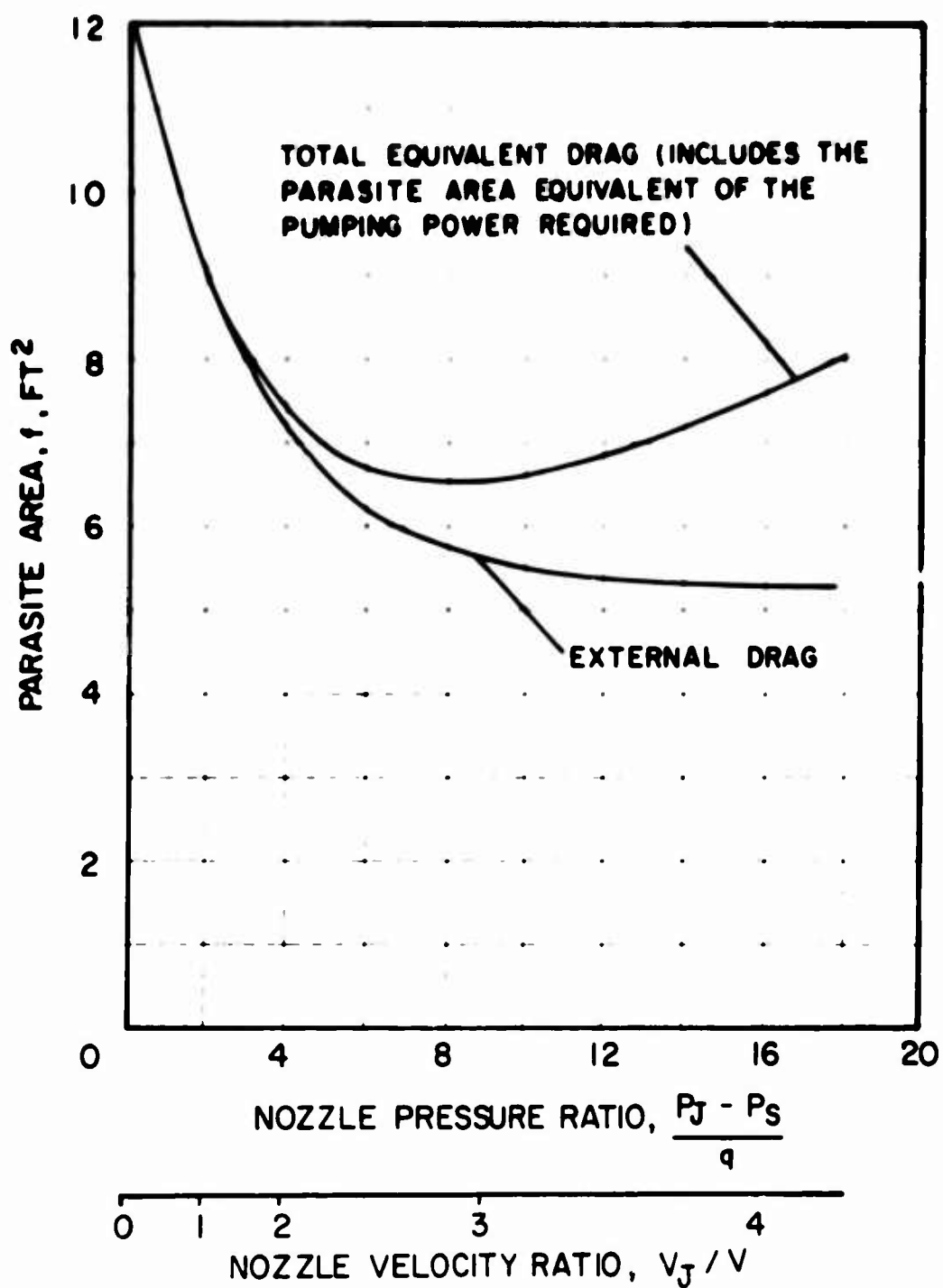
Figure 15. The Effect of Boundary Layer Control Jet Pressure
Ratio on the Drag Characteristics of the Full-Scale
Pylon-Ellipsoidal Rotor Head Fairing Model.
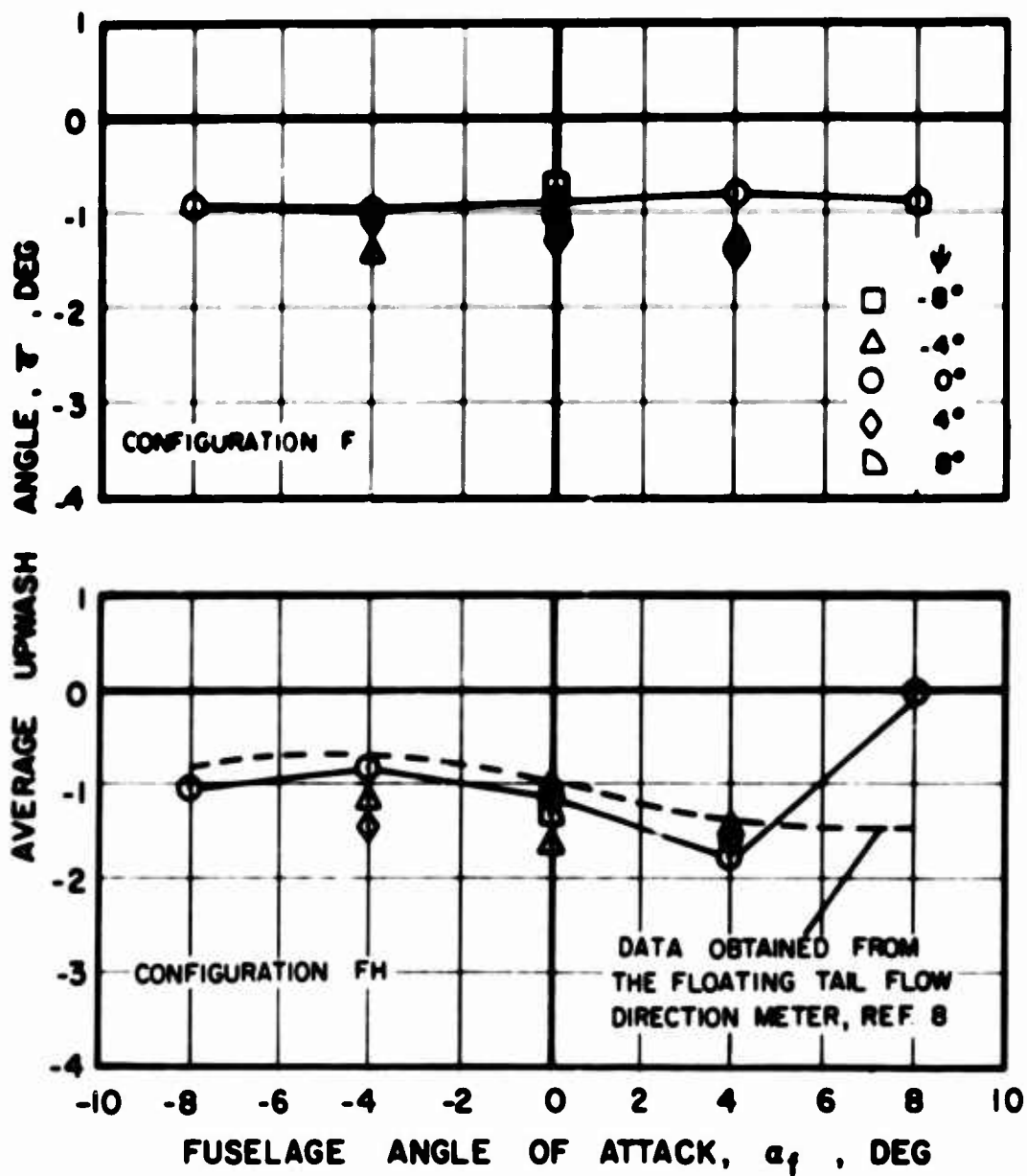
Figure 16. The Effect of Fuselage Angle of Attack on the Average Upwash Measured Behind the Helicopter Model for Various Rotor Head Configurations.
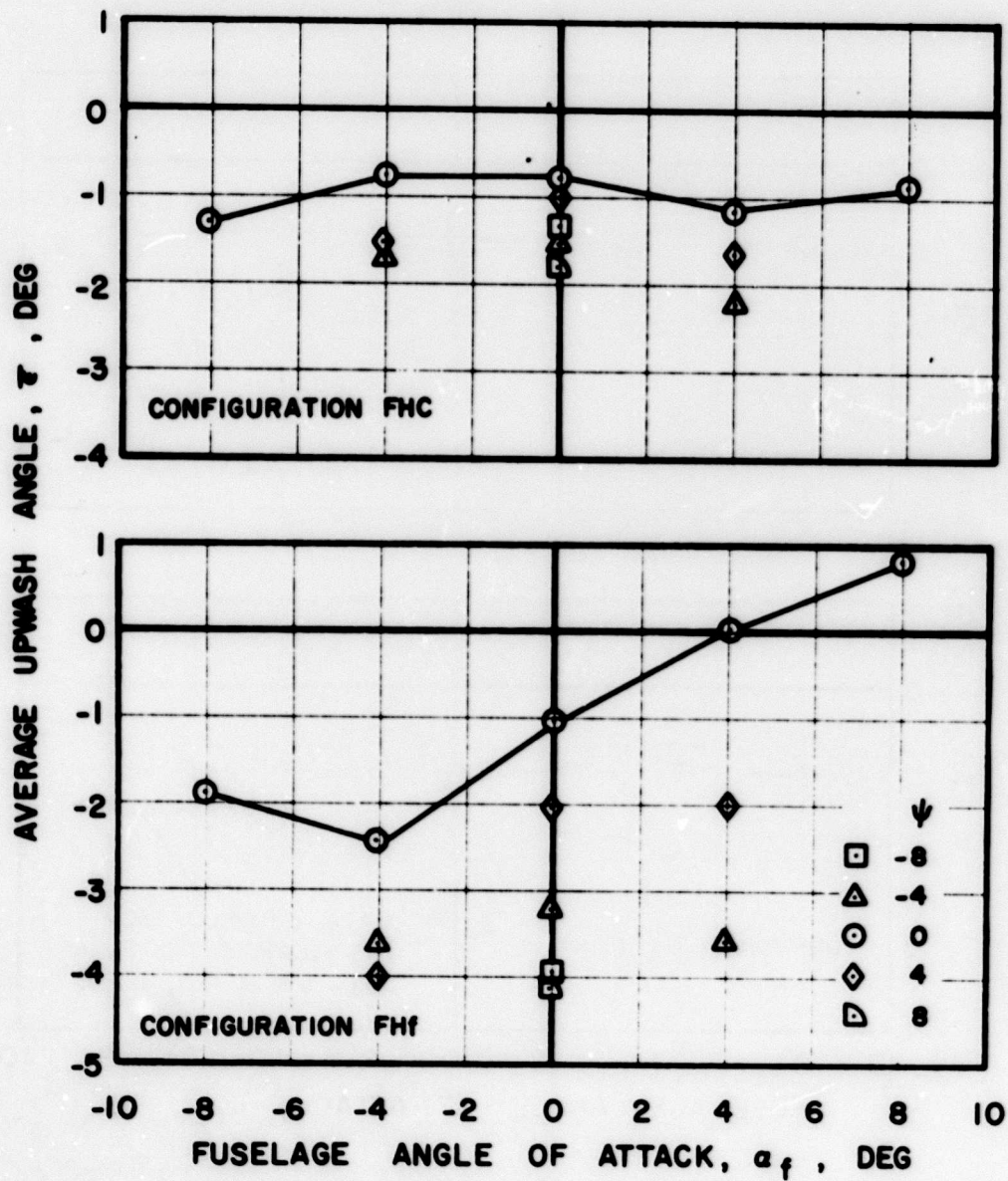
Figure 16. Concluded

46
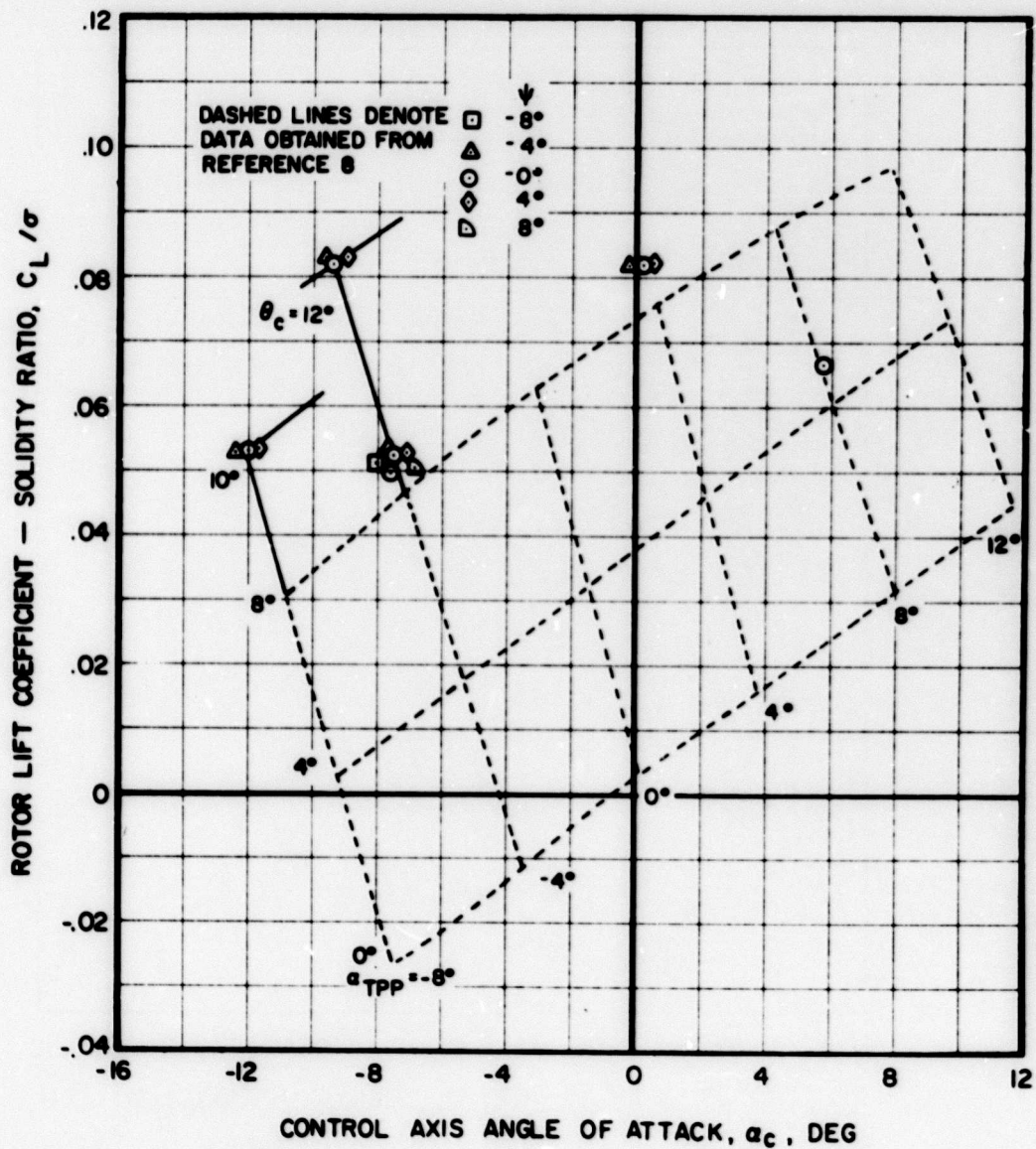
Figure 17. Rotor Performance Data, Including Comparative Data From Reference 8. V_s = 120 Knots, μ = 0.3, Configuration FHB.
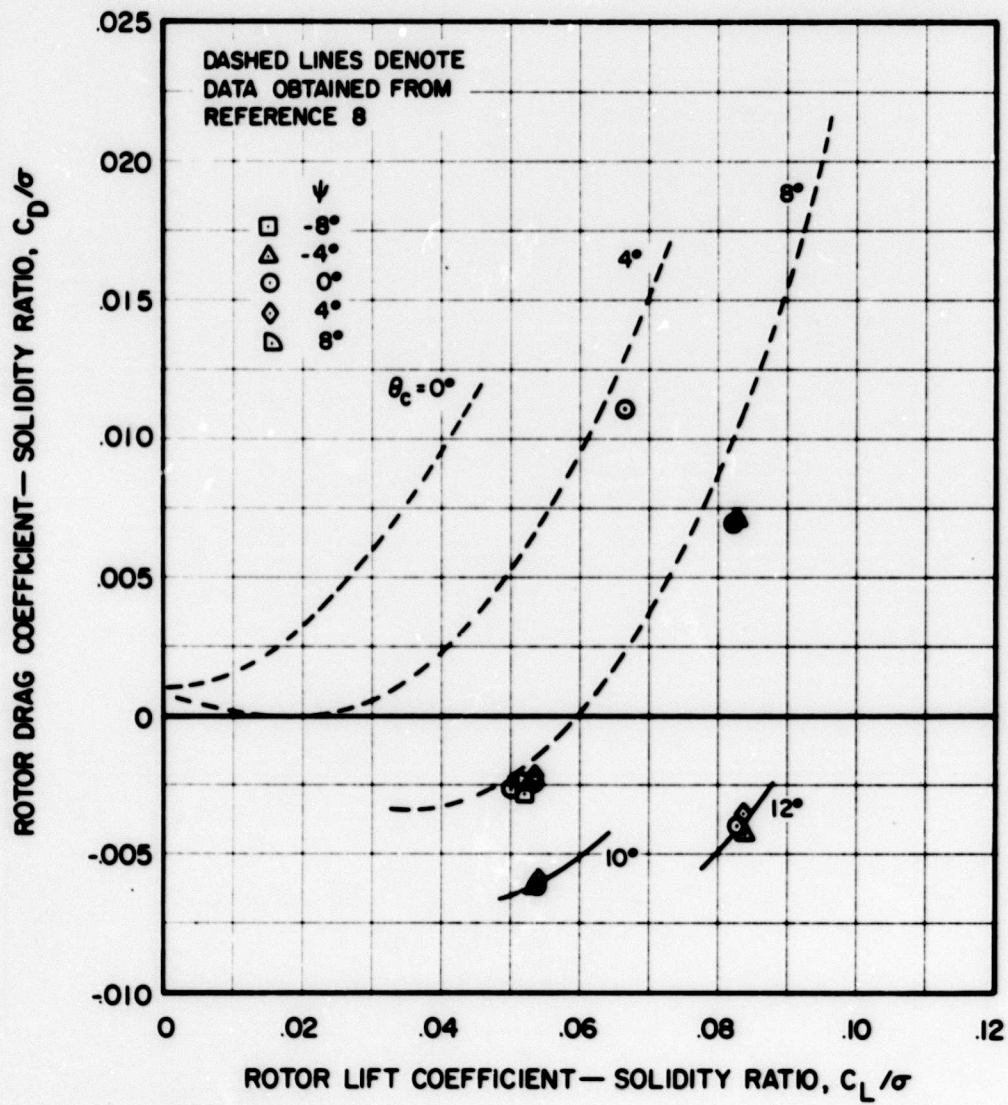
Figure 17. Continued
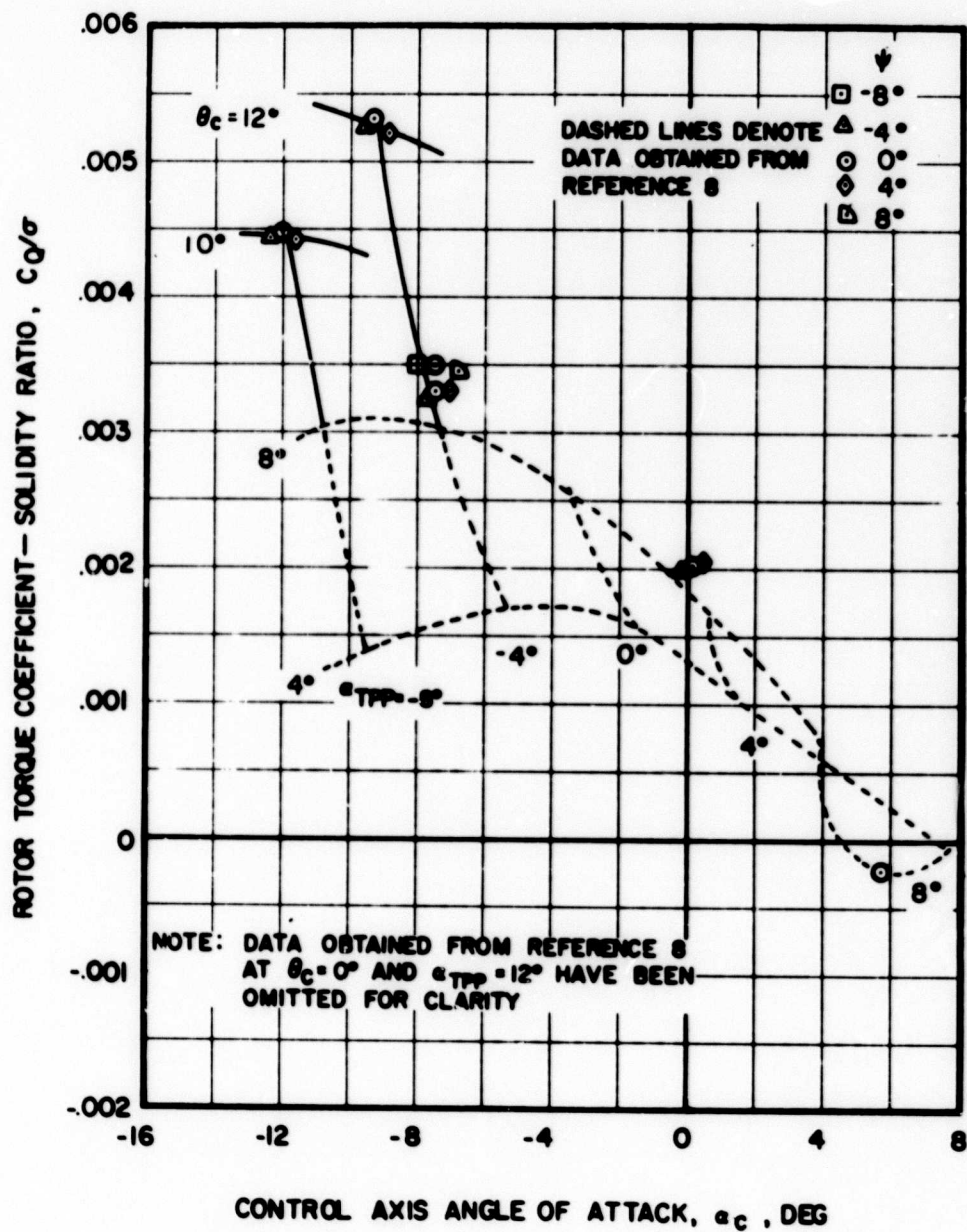
Figure 17. Concluded

49
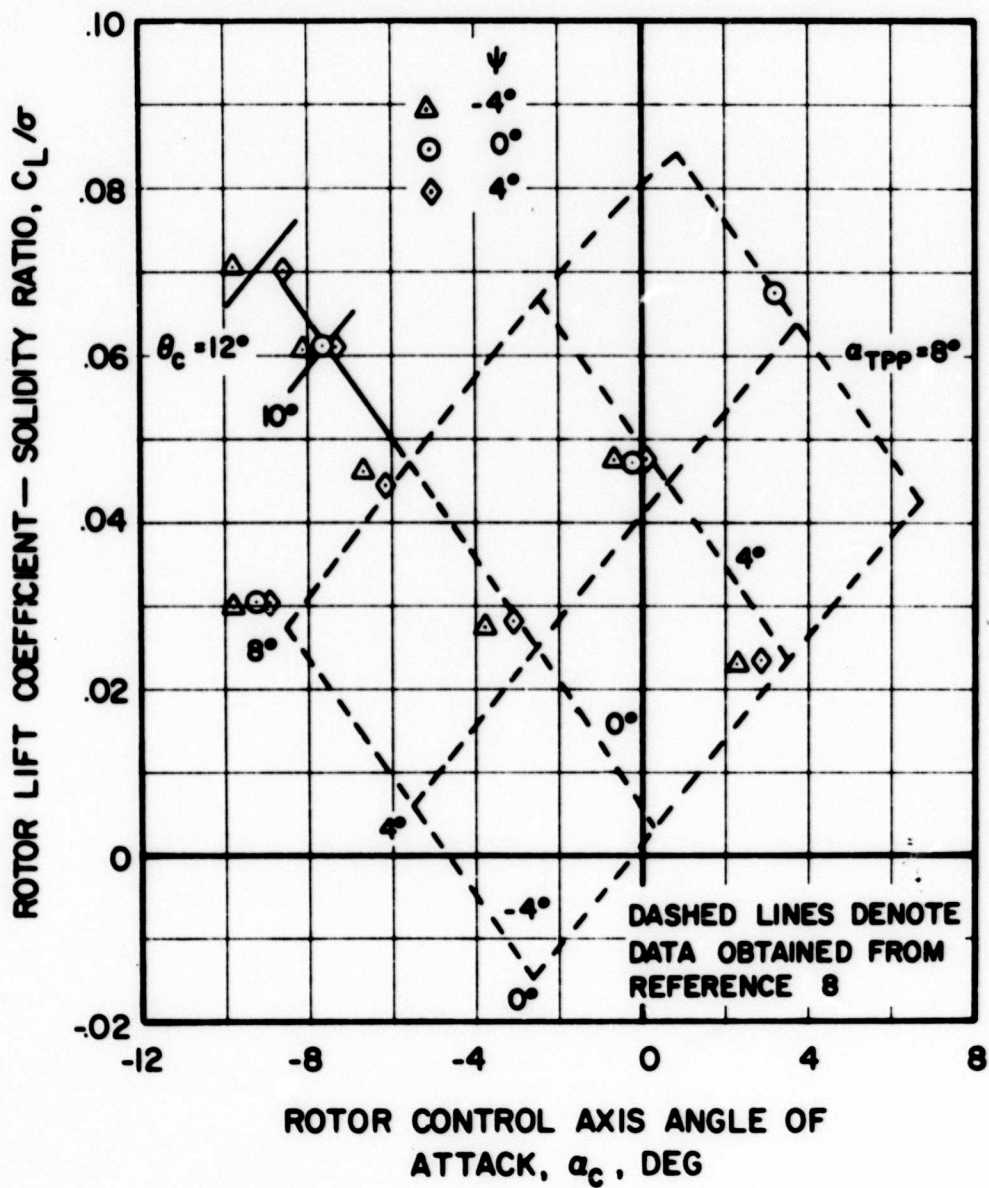
Figure 18. Rotor Performance Data, Including Comparative Data From Reference 8. V_S = 200 Knots, μ = 0.5, Configuration FHB.
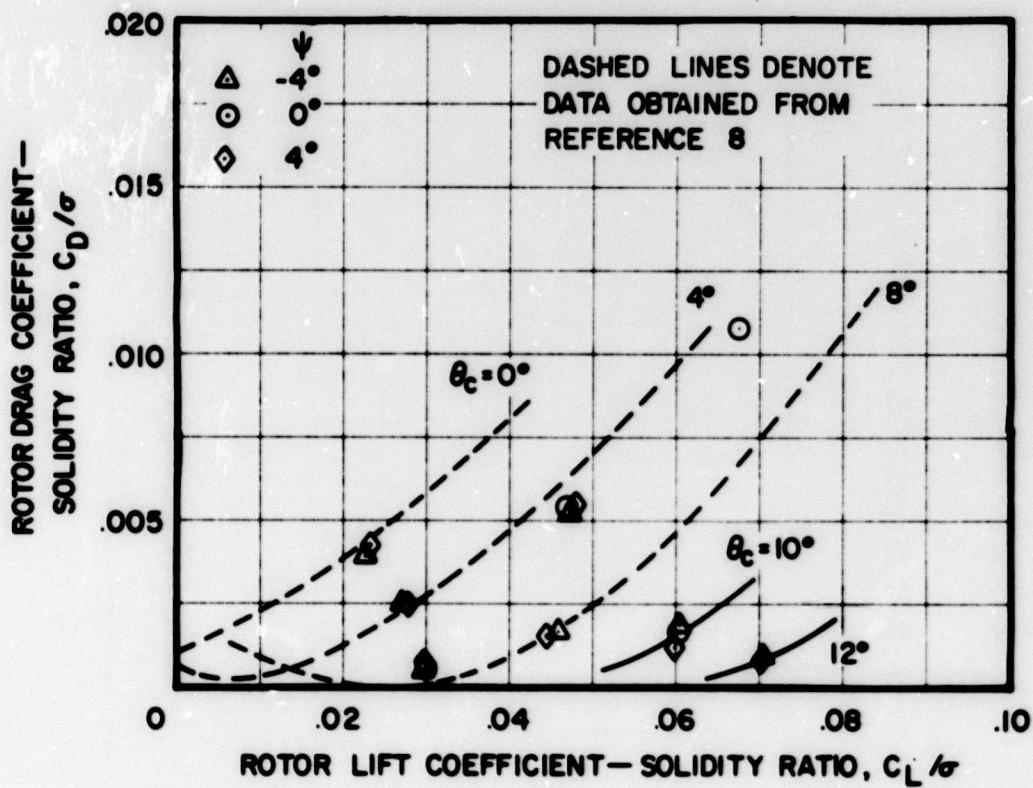
Figure 18. Continued

51
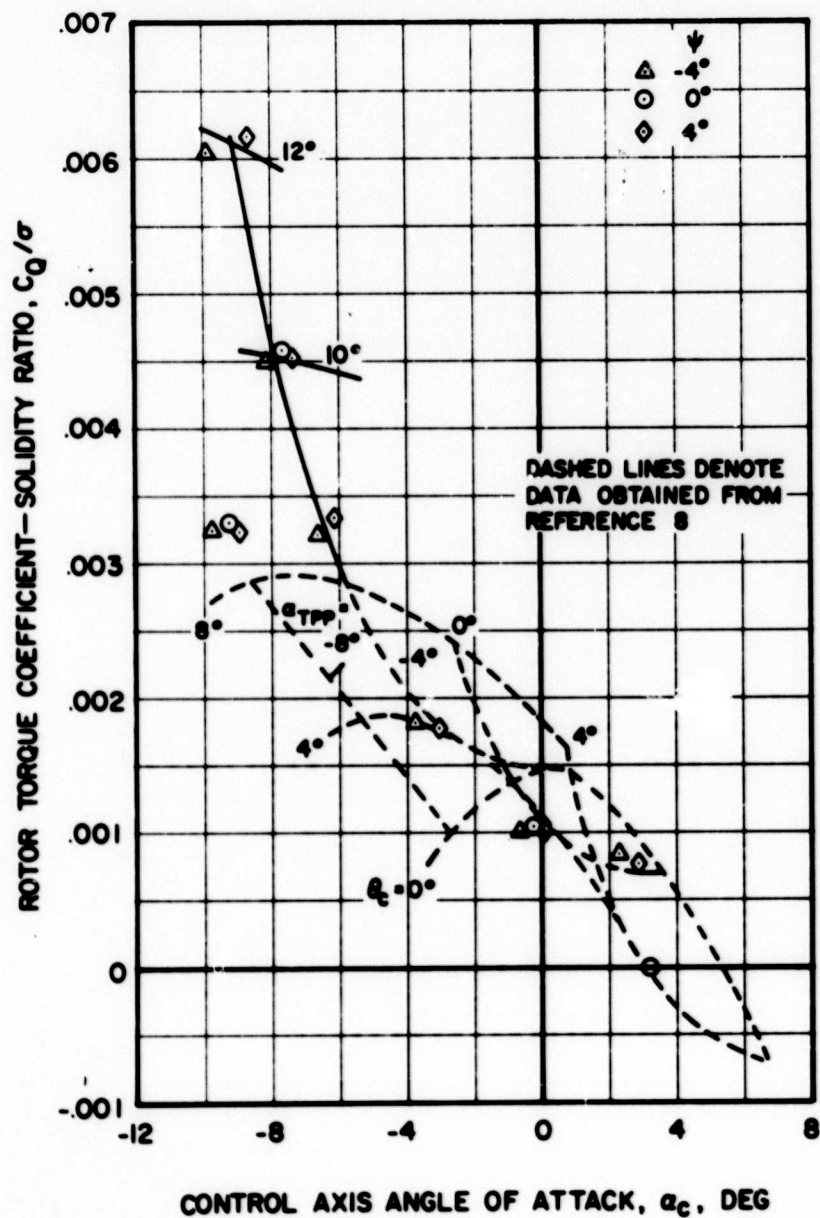
Figure 18. Concluded
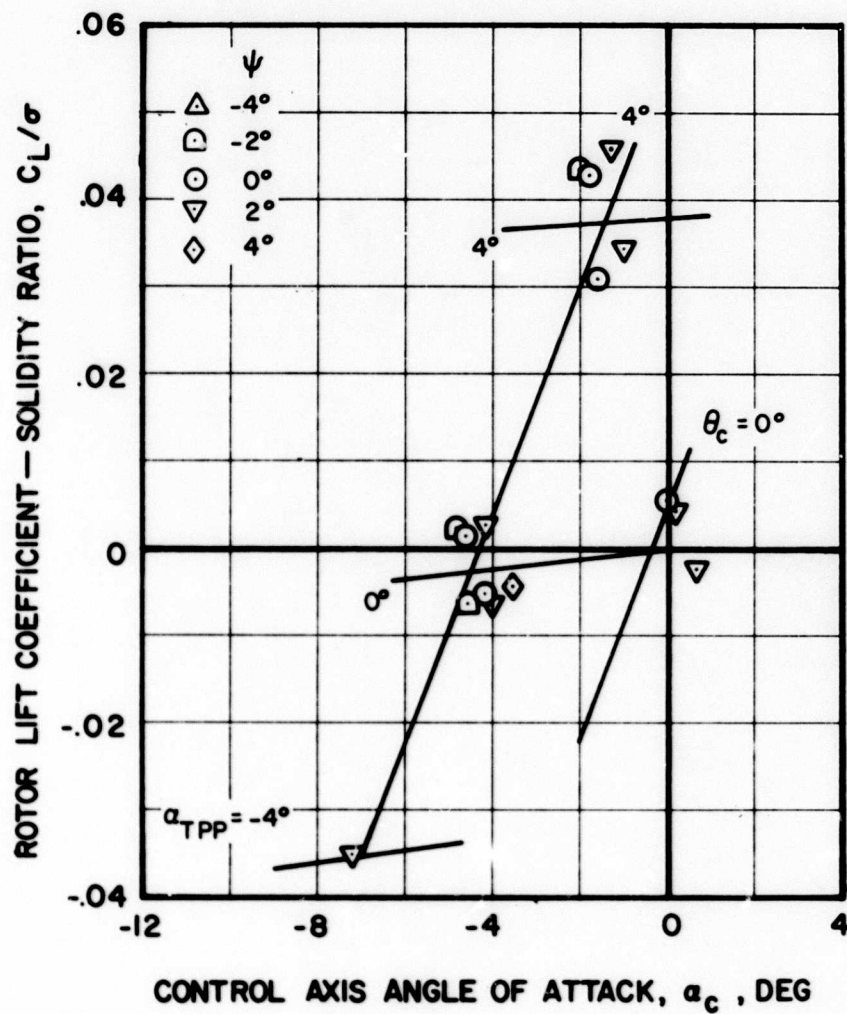
Figure 19. Rotor Lift Data. V_S = 250 Knots, μ = 1.0, Configuration FHB.
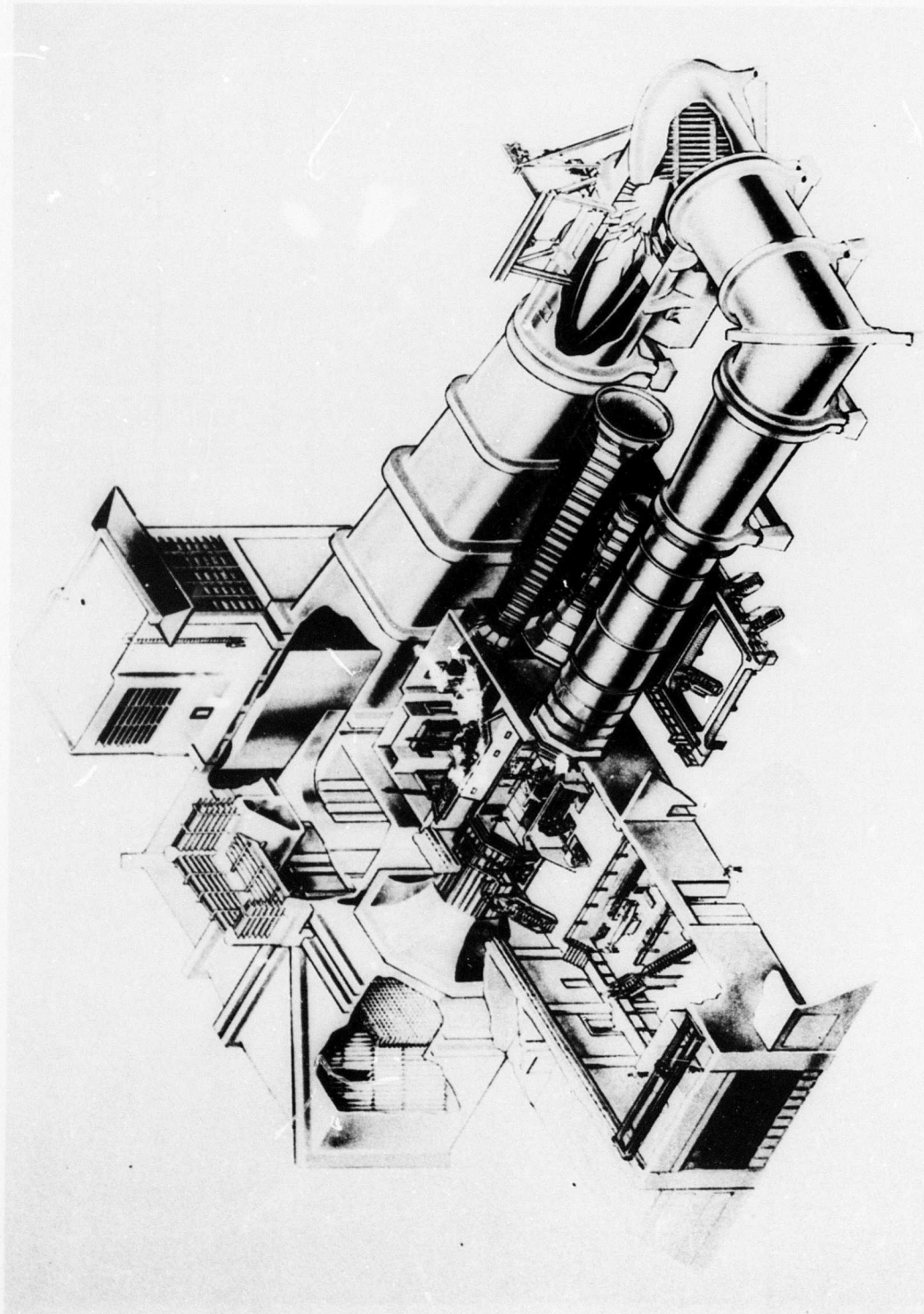
Figure 20. United Aircraft Research Laboratories
18-Foot Main Wind Tunnel.

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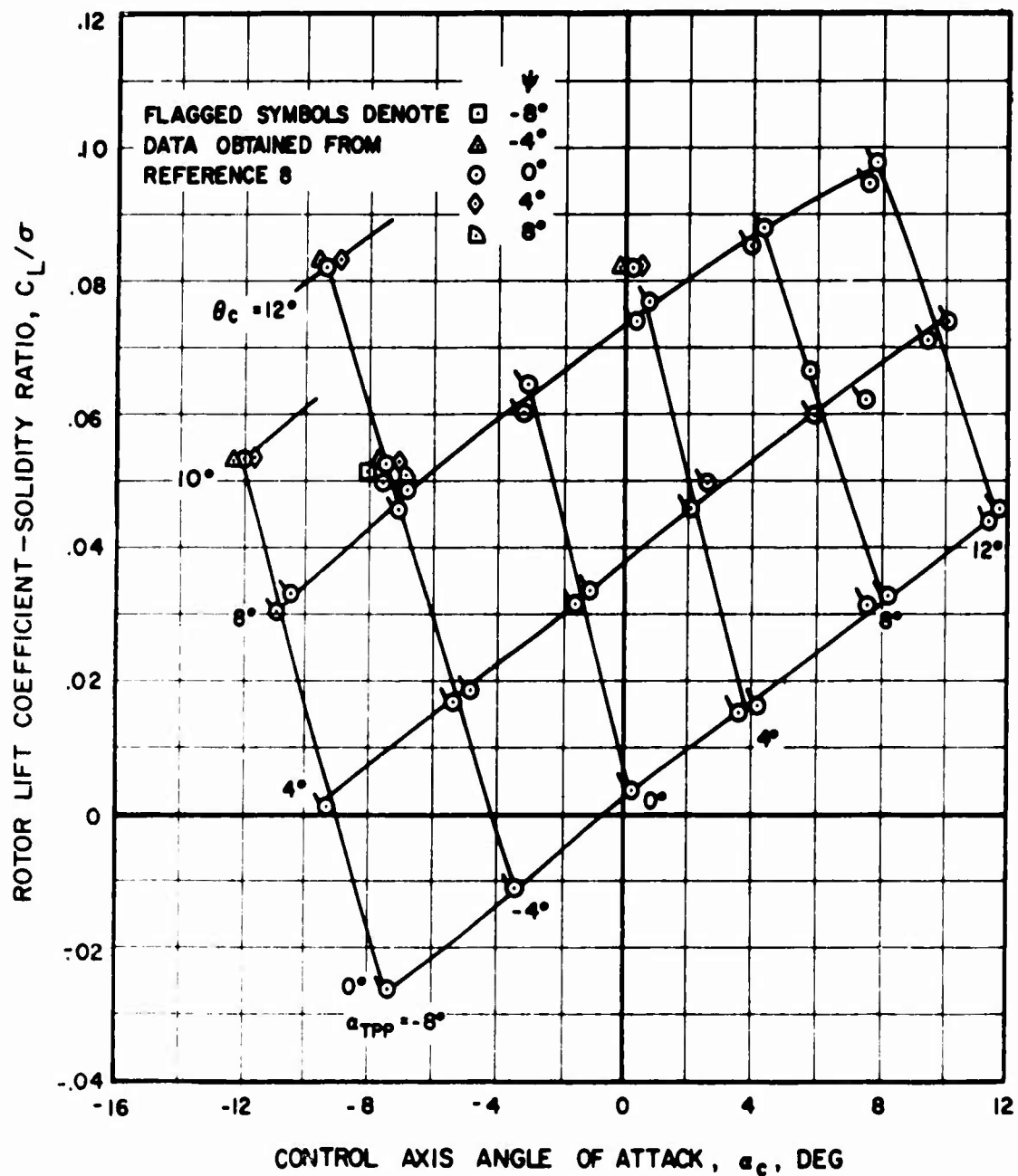
Figure 21. Sample Rotor Performance Data, Including Comparative
Performance Data Obtained From Reference 8.
V_S = 120 Knots, μ = 0.3.

Figure 21. Continued

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Figure 21. Concluded

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V, Knots	V_s, Knots	Approximate μ,μ^*	N, rpm
60	120	0.3	742
100	200	0.5	716
125	250	1.0	447
150	300	1.0	529
105**	105**	.27**	205**
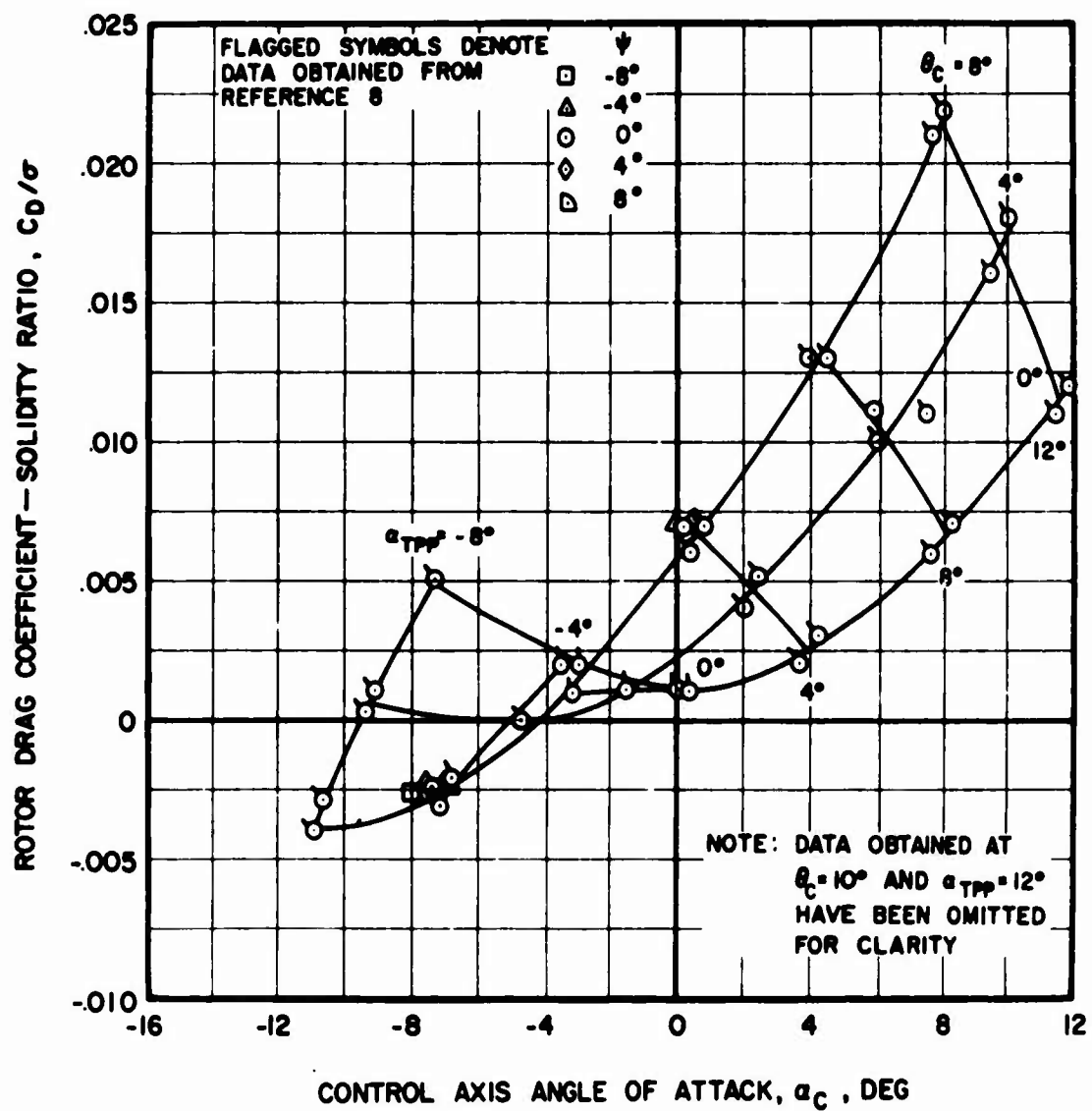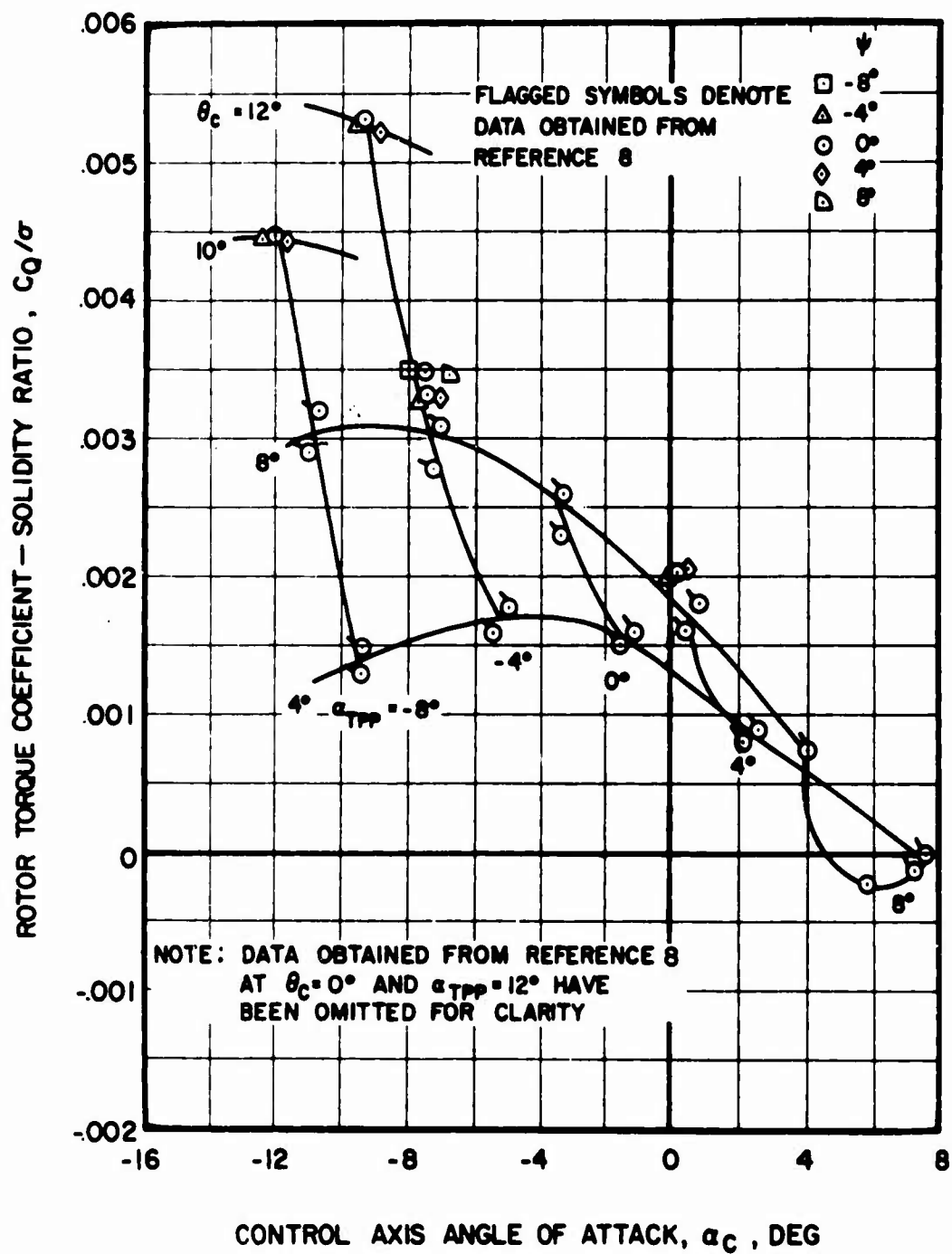
TABLE I. SUMMARY OF ROTOR OPERATING CONDITIONS

** These operating conditions are for the full scale data, Reference 1.

Designation	Description of Model Configuration
F	Fuselage with no rotor head attached but with the rotor shaft protruding
FH	Fuselage with the rotor head attached
FHC	Fuselage with the rotor head and the "car" rotor head fairing attached
FHf	Fuselage with the rotor head and the ellipsoidal rotor head fairing attached
FHB	FH with rotor blades
FHBf	FHf with rotor blades

TABLE II. SUMMARY OF MODEL CONFIGURATIONS

TABLE III. AREAS ENCLOSED BY THE $C_P = 0.9$ CONTOURS FOR VARIOUS ROTOR HEAD CONFIGURATIONS AT TWO FUSELAGE ATTITUDES

Configuration	Area Enclosed by the $C_P = 0.9$ Contour	
	$\alpha_f = 0.0^\circ$, $\psi = 0.0^\circ$	$\alpha_f = -4.0^\circ$, $\psi = -4.0^\circ$
F	1.30 ft^2 (69% of FH)	1.25 ft^2 (71% FH)
FH	1.88 ft^2 (100% of FH)	1.76 ft^2 (100% of FH)
FHC	2.22 ft^2 (118% of FH)	1.90 ft^2 (108% of FH)
FHf	2.09 ft^2 (111% of FH)	1.50 ft^2 (85% of FH)

TABLE IV. DATA RUN SUMMARY				
Configuration	Simulated Forward Speed, Knots	Wake Survey Data Run Number	Rotor Performance Data Run Number	Blade Stress Data Run Number
F	120	34	34	-
	200	35	35	-
	300	36	36	-
FH	120	-	87	-
	200	7	87	-
	300	8	87	-
FHC	120	10	88	-
	200	11	88	-
	300	12	88	-
FHf	120	21	89	-
	200	22	89	-
	300	26	89	-
FHB	120	14,15	61	61
	200	16	62	62
	250	41	41	41
FHBf	120	28,29,30	29,30	29,30
	200	31	31	31
	250	33	33	33

TABLE V. WAKE PRESSURE COEFFICIENTS AND FLOW DIRECTIONS AT THREE
FORWARD SPEEDS AND VARIOUS FUSELAGE ATTITUDES,
CONFIGURATION F

RUN 34 POINT 5 ALPHA= .0 DEG PSI= -.0 DEG
V=60 KNOTS   q= 11.4 PSF.   CONFIGURATION F

.96	.98	.94	1.03	.93	.95	1.07
.98	.94	.98	.96	.96	.92	1.06
.98	.96	.93	.96	1.01	.89	1.00
	.95	1.00	.96	1.07	.93	
[-1.0 / -.1]	.94	.97	.96	1.09	.94	[-1.0 / -.2]
.93	.93	.94	.91	1.05	.97	
.96	.98	.83	.98	1.04	1.02	.95
[-.4 / -1.9]	.98 [-3.7 / -2.6]	.77	.92	.98	1.08 [-1.4 / -.4]	.88
.93	.93	.90	.65	.95	1.07	
.96	1.07	.60	.84	.96	1.06	.95 [-.0 / .2]
1.00	.92	.73	.76	.92	1.02	
1.13 [-.4 / 1.00, -1.9]	.93 [-1.6 / 2.9]	.77	.59	.98	.99	1.02
1.05	.96	.94	.54	.47	.95	
	.96	.88	RAKE MOUNTING POINT	.44	.92	
1.01	1.00	.75	.36	.84	.91	
	1.01	.93	.62	1.09	.93	
.99		.88	.60	.96	.99	
.95		.71		.80	1.09	
.98		.98		.95	1.06	

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.
SURVEY PLANE   7.475 IN   RAKE MOUNTING POINT

NOTE— TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

RUN 34 POINT 6 ALPHA=-8.0 DEG PSI= -.0 DEG
V= 60. KNOTS   q= 11.4 PSF.   CONFIGURATION F

.94	.94	.96	.99	.99	.95	.93
.92	.91	.98	.96	.98	.98	.91
.99	.95	.97	.96	.98	1.06	.94
.97	.99	.99	.94	.97	1.07	
.97	.97	1.02	.96	.88	1.08 [-6.3 / -.3]	.94
	.98	1.01	.98	.92	1.03	
.97	.98	.98	1.00	.93	1.02	.98 [-7.9 / .8]
	.99 [-6.9 / -1.2]	.95 [-8.2 / -1.6]	1.01	.94	.98 [-8.3 / -1.1]	.91
.97	.93	.94	1.00	.96	.91	.90
	.95	.92	1.01	1.05	.90	.94
.97	1.02	1.02	1.01	1.09	.94	1.02
	.97	1.00	.74	1.02	.95	1.08 [-5.1 / 1.0]
.96	.87	.79	.85	.50	1.12	1.06
	1.10 [-7.1 / -1.1]	.82 [-11.7 / 5.6]	RAKE MOUNTING POINT	.74	1.04 [-9.6 / -.8] 1.12	1.07
1.09	1.07	.57	.78	1.13	1.07	1.01
1.00	1.00	.64	.53	.98	1.05	
	.94	.48		.99	1.02	
.96	.97	.64		.88	.98	
	1.00	.76		.82		

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.
SURVEY PLANE   7.475 IN   RAKE MOUNTING POINT

NOTE— TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

TABLE V - Continued

POINT 8

RUN 34 POINT 8 ALPHA= 4.0 DEG PSI= -.0 DEG CONFIGURATION F
V=60 KNOTS q= 11.4 PSF.

.96	.90	.98	.93	.98	1.04	.92
.98	.92	1.00	.99	.95	1.08	.91
.96	.97	1.01	.97	.92	1.08	.95
.97	.96	.75	.96	.92	1.06	.96
	.98	.75	.97	.94	1.03	
.96	.96	.94	.86	.96	1.00	
.97	.96	.96	1.02	.98	.95	
.93	.92 [box 2.4 / -.1]	.89	.66	.95 [box 4.1 / -.9]	.92 [box 2.4 / -.1]	1.05
	.92	.99	.70	1.04	.90	
.96	1.01	.98	1.05	.85	.96	
.97	.96	.98	1.19	1.08	.93	1.11
	1.04	.95	.60	1.06	.99	
.93	1.00	.58	.75 RAKE MOUNTING POINT	1.02	1.06	1.06
1.07 [box 2.8 / -1.9]	1.01 [box 3.6 / 4.8]	.63		1.08 [box 2.8 / -3.9]	1.12 [box 3.7 / .7]	1.05
1.01	.94	1.07	.74	.76	1.12	1.05
	1.01	.89	.24	.41	1.10	
.94	.97	.69	.87	.55	1.05	
	.96	1.02		.84	.98	
	.99	.77		1.00	.94	

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{p_T - p_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW MODEL NOSE, LOOKING AFT.

POINT 7

RUN 34 POINT 7 ALPHA=-4.0 DEG PSI= -.0 DEG CONFIGURATION F
V=60 KNOTS q= 11.4 PSF.

.98	.95	.94	.99	.95	.98	1.09
.98	.99	.96	.96	.96	.98	
.98	.97	.97	.96	1.11	1.02	1.05
.95	.96	.98	.94	1.10	1.~	
.99	.97	.97	.92	1.04	1.14	1.00
	1.01	.96	.96	1.01	1.14	
.99	1.00	.97	.97	.95	1.13	.97
1.01 [box -5.5 / -.3]	1.00 [box -5.7 / -.5]	.99	.91	1.00 [box -5.1 / -1.2]	1.11 [box -3.9 / -.3]	1.01
	.99	.89	.91	1.00	1.06	
.98	.95	.81	.81	1.01	1.04	
.98	.98	.56	.65	1.00	1.00	1.00
	.95	.74	.39	1.03	1.01	
.99	.76	.58	.66 RAKE MOUNTING POINT	.97	1.01	1.03
1.16 [box -4.1 / -1.6]	1.05 [box -3.4 / 1.8]	.98		1.13 [box -4.9 / -1.2]	1.01 [box -3.2 / .8]	1.10
1.08	1.09	.60	.48	1.13	1.06	1.17
	.95	.71	.58	1.10	1.12	
.94	.98	.63	.68	1.02	1.15	1.13
	.95	.98		1.02	1.15	
	.93	.94		.90	1.10	

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{p_T - p_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW MODEL NOSE, LOOKING AFT.

TABLE V – Continued

RUN 34 POINT 10 — ALPHA= 4.0 DEG   PSI=-4.0 DEG
V=60 KNOTS   q= 11.4 PSF.   CONFIGURATION F

.96	.98	.95	.94	.94	1.03	1.05
.98	.96	.98	.95	.97	1.09	1.01
1.01	.95	.99	.93	1.07	1.15	
	.99	.90	.96	1.01	1.13	.98
.99	.85	1.00	.97	.96	1.14	
1.01	.80	1.06	.98	1.01	1.13	1.01
1.00	.80	.82	.97	1.00	1.09	
1.02	.82 [-.1/-4.1]	.97	.83	1.01	1.04 [5.0/-3.4]	1.01 [4.5/-2.0]
	.98	.81	.95	1.09	.98	
1.01	.95	.68	.71	1.13	.98	1.04
1.00	.84	1.02	.29	1.16	1.05	
	.71	.78	.70	1.17	.99	
1.02	.96	.66	.44	1.18	1.07	1.13
1.14 [4.3/-4.2]	.82 [-.1/3.2]	1.01	RAKE MOUNTING POINT ⊕	1.10	1.12 [2.5/-4.4]	1.18 [4.2/-1.4]
	.60	1.10		1.04	1.17	
1.05	.40	.97	1.11	1.04	1.19	1.12
	.78	.98	.62	1.00	1.14	
.99	.99	1.07	.81	1.00	1.12	1.12
	.94	.91		.98	1.11	

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{p - p_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW MODEL NOSE, LOOKING AFT.

RUN 34 POINT 9 — ALPHA= 8.0 DEG   PSI= -.0 DEG
V=60 KNOTS   q= 11.4 PSF.   CONFIGURATION F

.99	.98		.96	.96	1.00	1.01
1.00	1.00	.82	.93	.97	1.04	
1.02	.94	.84	.79	.93	1.09	.94
1.04	.96	.95	.74	1.01	1.11	
1.01	1.02	1.07	.50	.92	1.09	.94
1.06	.98	1.08	.84	.95	1.14	
1.02	1.05	.93	.60	.94	1.06	.96
	.96	.79	1.03	.94	1.01 [7.5/-5.8]	
1.17	1.03	.93	1.21	.99	.98	.99
1.05	1.00	1.01	.92	1.24	.89	
1.01	1.05	.93	.62	1.06	.98	1.02
	.88	.93	.64	.96	.94	
	.97	.43	.60	.84	1.00	1.07
	1.03 [5.3/-.8]	.62	RAKE MOUNTING POINT ⊕	.78	1.01 [6.6/-2.5]	1.13 [5.9/1.1]
	.99	.60		.69	1.07	
	.98	.67	.57	.69	1.14	1.15
	.96	.68	.13	.76	1.11	
	1.02	.74	.41	.67	1.11	1.0υ
	.99	.93		1.04	1.06	

(Boxes noted in left panel: [5.2/1.0], [4.6/-1.0], [7.1/4.7], [9.0/-1.0])

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{p - p_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW MODEL NOSE, LOOKING AFT.

TABLE V - Continued

RUN 34   POINT 11   ALPHA=-4.0 DEG   PSI=-4.0 DEG   CONFIGURATION F
V=60 KNOTS   q = 11.4 PSF.

RUN 34   POINT 12   ALPHA=-8.0 DEG   PSI=-4.0 DEG   CONFIGURATION F
V=60 KNOTS   q = 11.4 PSF.

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{p - p_\infty}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE PLANE MODEL NOSE, LOOKING AFT.

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TABLE V – Continued

Right table header:

RUN 34 POINT 14 ALPHA=-4.0 DEG PSI= 4.0 DEG
V=60 KNOTS q= 11.4 PSF. CONFIGURATION F

	1.00	.99	.94	.95			1.01
	.97	.95	.97	.95			1.00
	.95	.98	.99	.99			.96
	.96	.94	.98	1.01			
	.96	.98	.98	.97			.93
	.95	.96	.98	.90		.89	
	1.01	.99	1.00	.85			.82
.97	.97	1.00	.95	.87			.87
.95		1.01	1.02	.77			
.96		.98	.95	.70	-6.1 / 4.9		
.96	[-5.2 / 3.4]	.99	.97	.93		-4.7 / 3.1	.89
.95	1.00	.93	1.00	1.00			.93
1.12	[-3.7 / -4.5]	.94	.75	.45			
1.07	.99	.97	.48	.55			
1.02	.97	.98	.42	.59	-6.4 / -.9		
	.94	.96	.79	.90			

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_t - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW.
MODEL NOSE, LOOKING AFT.

Left table header:

RUN 34 POINT 13 ALPHA=8.0 DEG PSI= 4.0 DEG CONFIGURATION F
V=60 KNOTS q= 11.4 PSF.

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_t - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW.
MODEL NOSE, LOOKING AFT.

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TABLE V – Continued

RUN 34 POINT 16 ALPHA= .0 DEG PSI=-8.0 DEG
V= 60. KNOTS q = 11.4 PSF. CONFIGURATION F

.95	.91		.98	1.00	.99	1.12	.97
.96	.95		1.00	.97	1.02	1.10	.96
.97	.96		1.01	1.00	.97	1.06	1.01
	.94		.99	1.01	.99	1.04	
	.95		.98	1.00	1.02	1.01	1.04
	.95		1.00	1.04	1.03	.95	
.88	.99		.96	.98	1.11	.94	
.76	.92	[-4.6 / -10.2]	1.00	1.00	1.09	.95 [1.9 / -7.9]	1.0 / -6.6 → 1.10
	1.03		1.06	1.00	1.10	.94	1.09
.71	.71		.91	.87	1.12	.97	1.10
	1.03		.78	.58	1.02	1.05	
	.61		.48	.57	1.05	1.11	
.89	.94		.71	.67	.95	1.14	
1.06	.88	[-1.6 / -3.6]	.96 [-2.8 / 4.7]	RAKE MOUNTING POINT	.91	1.08 [.2 / -7.7]	.8 / -3.8 → 1.07
	.96		1.00		.96	1.07	
.98	.96		.95		.95	1.07 [.0 / -8.1]	1.02
	.98		.16	1.08	1.02	1.01	
	.71		.66	1.02	1.04	.95	
.89	.62		.76	.81	1.09	.95	1.00

RUN 34 POINT 15 ALPHA= 4.0 DEG PSI= 4.0 DEG
V= 60 KNOTS q = 11.4 PSF. CONFIGURATION F

.96	.99	1.01	.99	.94	1.01	.99
.99	1.00	.97	.94	.98	1.06	.94
1.02	.97	1.03	.97	.98	1.10	.94
1.04	.99	.98	.94	.88	1.17	
	1.03	1.00	.98	.90	1.04	.99
	1.01	.94	.91	.73	1.05	
	1.02	.96	.79	.91	1.05	
1.01	1.03 [5.4 / 2.8]	.98	1.09	.89 [3.3 / 2.2]	.84 1.5 / 2.6 → 1.01	
	1.02	1.06	.77	.85	.96	1.00
1.02	1.00	1.08	.76	.87	1.08	
	.99	1.01	.89	1.12	1.03	
	.97	.82	.51	1.12	1.01	1.10
1.03	.95	.64	1.02	.96	1.28	
1.17	.98 [3.3 / 1.8]	1.03 [3.2 / -7.4]	RAKE MOUNTING POINT	.77 [.3 / .5]	1.07 4.3 / 2.6 → 1.15	
	1.01	1.04	.94	.66	1.13	
1.07	.99	1.01	.33	.83	1.04	1.14
	.98	.98	.94	.57	.98	1.07
	1.00	1.01	.33	.07	1.01	
1.01	.96	.99	.56	.78	.99	

TABLE V - Continued

RUN 34 POINT 17 ALPHA= .0 DEG PSI=-4.0 DEG
V=60 KNOTS q= 11.4 PSF. CONFIGURATION F

RUN 34 POINT 18 ALPHA= .0 DEG PSI= 4.0 DEG
V=60. KNOTS q= 11.4 PSF. CONFIGURATION F

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW
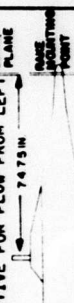MODEL NOSE, LOOKING AFT.

TABLE V - Continued

RUN 34 POINT 19 · ALPHA= .0 DEG · PSI= 8.0 DEG
V=60 KNOTS · q = 11.4 PSF. · CONFIGURATION F

.98	.94	.3 / .3	1.01	1.00	.98	1.10	.95
.99	.92		.99	.99	1.02	1.12	.5 / 1.4	.97
.97	.98		1.00	.98	.92	1.07	.98
	.99		.97	.95	1.00	1.08	
	.98		1.01	1.01	.97	1.09	
	.99		1.01	1.00	.99	1.02	
.96	1.00		.97	1.03	1.08	.96	.99
.99	.99 / .98	1.1 / 5.0	.90	.97	1.08	.51	−3.7 / 1.5	1.05
	.94		1.00	.98	.63	−2.1 / 7.8	.94	1.10
	.95		.99	.91	.90	.87	
	.95		.94	.93	1.06	.46	1.10
	.98		.96	.63	1.00	.88	
.96	1.04		.98	.74	.91	.60	1.10
1.09	1.00 / .95	.4 / 1.8	1.17	RAKE MOUNTING POINT	.54	1.03 / 1.10	−.4 / −22.8	1.12
	.99		.99	1.03	1.06	1.08	
1.02	.97		1.01	1.01	1.06	1.04	.85	1.06
	1.01		.97	.92	.33	.91	
.99	.98	−.7 / 4.5	.98	.18	.39	.80	1.01
	.98		.96	.85		

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_t - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

7.475 IN
RAKE MOUNTING POINT

NOTE- TABLE IS SEEN FROM THE PLANE
MODEL NOSE, LOOKING AFT.

RUN 35 POINT 5 · ALPHA= .0 DEG · PSI= −.0 DEG
V=100 KNOTS · q = 30.7 PSF. · CONFIGURATION F

.99	1.00		.98	.95	.98	.98	.99
.99	.98		.98	.98	.96	1.00	.99
	.98		.96	.97	1.00	1.02	
.95	.99		.99	.97	.99	1.03	
	1.00		.98	.98	.95	1.04	
	.99		.96	.95	.97	1.02	
.99	.98	−.8 / .1	.91	.83	.94	1.01	
1.00	.99		.92	.94	.93	1.00	
.99	.97	−2.2 / .2	.77	.74	1.11	−.6 / −1.6	1.00	
	.82		.91	.62	.97	.95	
.99	1.00		.44	1.01	1.06	.96	
	.99		1.11	.79	.97	1.09	
.99	.99		.67	.77	.67	.95	
1.06	1.02 / .99	−2.2 / 4.4	.60 / .80	RAKE MOUNTING POINT	.52 / 1.03	−.3 / −2.2	1.07 / .98	1.01
	1.03		1.04	1.06	1.03	
1.03	.98		1.05	.51	.96	−.6 / .1	1.03
	.98		1.05	.32	.95	
.99	.99		1.01	.16	.87	1.02

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_t - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

7.475 IN
RAKE MOUNTING POINT

NOTE- TABLE IS SEEN FROM THE PLANE
MODEL NOSE, LOOKING AFT.

TABLE V – Continued

Right panel

RUN 35 POINT 7 ALPHA=4.0 DEG PSI=-.0 DEG
V=100. KNOTS q= 30.7 PSF. CONFIGURATION F

.97		.98	.99	.98	.99	.99	1.01	.94
.98		.98	.97	1.00	.98	.97	.99	.97
.98		1.00	.98	.99	.97	.94	.98	.98
.96		.98	.97	1.00	.96	.95	.97	.93
.94		.96	.94	1.00	1.01	1.00	.94	1.01
.97		.95	.94	1.01	1.00	.96	1.01	1.00
1.02		1.08	.51	.94	.61	.80	.94	.98
1.00		1.07	.73	1.01	.90	1.03	.97	.98
.98		.99	.69	.99	.80	1.00	.93	.96
		.98	.89	.98	.82		.94	.93

Boxes: (−5.0 / −.0), (−6.2 / −.0), (−3.7 / −1.2), (−4.5 / −.0)
(−4.5 / −1.7), (−5.9 / 2.9), (−5.0 / −1.3), (−3.9 / .4)
(−5.1 / −3.0)

RAKE MOUNTING POINT ⊕

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY
PLANE TO RIGHT LOOKING AFT.

← 7475 IN →

RAKE MOUNTING POINT

NOTE- TABLE IS SEEN FROM THE FLOW MODEL NOSE, LOOKING AFT.

Left panel

RUN 35 POINT 6 ALPHA=-8.0 DEG PSI=-.0 DEG
V=100. KNOTS q= 30.7 PSF. CONFIGURATION F

.97		.97	.96	.98	.96	.95
.98		.97	.96	.97	.94	.97
.97		.99	.99	.94	.93	.96
.96		.96	.95	.94	.90	.96
.96		.96	.98	.97	.92	.96
.96		.98	.96	.97	.91	.94
1.00		1.03	.56	1.01	.95	.91	.92
1.00		1.04	.68	.04	.91	.92
.98		.99	.68	.88	.94	.92

Boxes: (−8.2 / −.7), (−9.2 / −.6), (−7.6 / −.9), (−8.9 / −.4)
(−7.7 / −1.7), (−10.5 / .9), (−8.8 / −.4), (−8.1 / .7)
(−10.0 / −2.8)

RAKE MOUNTING POINT ⊕

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY
PLANE TO RIGHT LOOKING AFT.

← 7475 IN →

RAKE MOUNTING POINT

NOTE- TABLE IS SEEN FROM THE FLOW MODEL NOSE, LOOKING AFT.

70

TABLE V – Continued

RUN 35   POINT 8   V=100 KNOTS   ALPHA= 4.0 DEG   q= 30.7 PSF   PSI=-.0 DEG   CONFIGURATION F

RUN 35   POINT 9   V=100 KNOTS   ALPHA= 8.0 DEG   q= 30.7 PSF   PSI=-.0 DEG   CONFIGURATION F

71

TABLE V – Continued

RUN 35   POINT 10   ALPHA= 4.0 DEG   PSI=-.0 DEG
V=100 KNOTS   q= 30.7 PSF.   CONFIGURATION F

RUN 35   POINT 11   ALPHA=4.0 DEG   PSI=-.0 DEG
V=100 KNOTS   q= 30.7 PSF.   CONFIGURATION F

RAKE MOUNTING POINT ⊕

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_P = \dfrac{P_1 - P_3}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW.
MODEL NOSE, LOOKING AFT.

72

TABLE V – Continued

RUN 35 POINT 12 ALPHA=-4.0 DEG PSI= 4.0 DEG CONFIGURATION F
V=100. KNOTS q = 30.7 PSF.

RUN 35 POINT 13 ALPHA= 4.0 DEG PSI= 4.0 DEG CONFIGURATION F
V= 100. KNOTS q = 30.7 PSF.

RAKE MOUNTING POINT

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P-P_\infty}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

RAKE MOUNTING POINT

73

TABLE V - Continued

RUN 35   POINT 14   ALPHA= .0 DEG   PSI=-6.0 DEG   CONFIGURATION F
V= 100. KNOTS   q = 30.7 PSF.

Data grid (pressure coefficients C_p):

.97			.97	.96	.99	1.01
.97			.97	.97	.99	.98
.99	.98	.98	.98	1.01	1.03	.97
.98	.98	1.00	.96	.97	1.04	
	.98	.95	.99	.96	1.02	.99
.87	1.01	.97	.99	1.00	1.00	
	.95	.71	.99	1.00	.98	.99
1.00	1.10	7.	1.01	1.01	.97	1.01
1.02	.81	.68	.87	1.02	.98	1.02
1.04	.45	.67	.71	1.04	.99	
1.01	.99	.97	.68	1.03	1.00	1.04
.85	.94	1.00	1.06			1.03
.68	1.00		.98			1.04
.93	1.04		.98	.96	1.03	

Boxes:
-3.4 / -8.4   -2.5 / -6.2   1.9 / -7.6   1.3 / -6.0
-1.1 / -6.2   -1.7 / 4.5   .7 / -8.4   1.0 / -5.7
                                .2 / -7.8
                                -8.4 / .98

$\oplus$ RAKE MOUNTING POINT $\leftarrow$ 7475 IN   RAKE MOUNTING POINT

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW $\rightarrow$
MODEL NOSE, LOOKING AFT.

RUN 35   POINT 15   ALPHA= .0 DEG   PSI=-6.0 DEG   CONFIGURATION F
V= 100. KNOTS   q = 30.7 PSF.

Data grid (pressure coefficients C_p):

.98	.98	.98	.96	1.00		
.96	.96	.96	.93			.98
1.01	.98	.95	.99	.95	.93	
1.00	.99	.94	1.00	.95		.98
1.00	.98	.94	.95	.97		
1.00	.93	.97	.95	.99		.96
.99	.85	.98	.95	.98		
1.01	.68	.97	.92	1.00	.2/-5.3	.94
1.02	.48	1.00	.95	.98		
1.04	.73	.02	.95	1.00		.95
	.69	.76	.96	.93		
1.02	.64	.73	.92	.94	1.3/-3.2	.96
1.01	.94	.72	.99	.96		
	.91	1.08	1.05	.95	1.03	.97
	.94	.89	1.01	.98		1.00
	.80	.95	.97			
	.69		.94			

Boxes:
-2.6 / -4.2   -4.2 / -3.5   .9 / -4.7   .2 / -5.3
-2.2 / 2.5   .1 / -4.6   .1 / -5.5   1.3 / -3.2
-.8 / -4.7

$\oplus$ RAKE MOUNTING POINT $\leftarrow$ 7475 IN   RAKE MOUNTING POINT

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW $\rightarrow$
MODEL NOSE, LOOKING AFT.

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TABLE V – Continued

Right table

RUN 35   POINT 17   ALPHA= .0 DEG   PSI= 0.0 DEG
V=100. KNOTS   q= 30.7 PSF.   CONFIGURATION F

	.96	.96	.96	.98	1.02
	1.00	.96	.95	.98	.99
	.96	.97	1.00	.98	.97
.97	.97	.96	1.02	.98	
	.96	.97	1.01	.94	.95
	.97	1.00	1.00	.98	
.99	.98	.99	.99	.96	
	.96		.59 [-4.8 / 1.5]	.98	.97
	.99	.92 [-2.3 / 4.0]	.83	.94	
.98	.97	1.04	.91	.95	.98
	.91	.61	1.09	.96	
	1.01	.26	.88	.98	
.96	.70 [RAKE MOUNTING POINT]	.65	1.08	.98	.97
	.96	.97	.89		
1.05	.99	.39 [-1.9 / -24.2]	1.02 [-1.0 / -25.4]	.94	.99
	.97	1.06	1.05	.97	
1.03	.99	.81	.70	.93	1.05
	.97	.91	.90	.93	
1.00	.95	.82	.37	.98	1.03

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_P = \dfrac{P-P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT. ⟵ 7475 IN

NOTE- TABLE IS SEEN FROM THE FLOW⟶
MODEL NOSE, LOOKING AFT.

Left table

RUN 35   POINT 16   ALPHA= .0 DEG   PSI= 4.0 DEG
V=100. KNOTS   q= 30.7 PSF.   CONFIGURATION F

.98	1.00 [-.4 / 3.7]	.99	1.00	.99	1.01
.98	1.00	.98	.98	.97	.99
.98	.98	.99	1.00	.95	.98
.98	1.01	1.01	1.00	.95	.96
.98	.99	.98	.98 [-.0 / 3.2]	.94	
.98	1.02	1.00	.86	.95	
	.99	.99	.73	.94	
.96	.96 [-1.2 / 2.0]	.97	.71 [-4.8 / 3.1]	.58 [-1.3 / 3.3]	.95
			.59	.88	
.96	.99	1.08	.65	1.01	
	.99	.96	.85	.82	
1.00	1.01	1.12	.50	.95	
1.05	1.01 [-1.0 / 5.2]	.89 [RAKE MOUNTING POINT]	.48	.92	.95
	1.00	.95	.88 [-1.0 / -.4]	.97 [-.3 / 3.3]	.93
1.01	.99	1.01	1.03	.84	
	1.01	.91	1.04		
1.00	1.00	.45	.32	.85	
1.00	1.00	.49	.74	.92	.98

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_P = \dfrac{P-P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT. ⟵ 7475 IN

NOTE- TABLE IS SEEN FROM THE FLOW⟶
MODEL NOSE, LOOKING AFT.

75

TABLE V – Continued

RUN 36 POINT 5 ALPHA=.0 DEG PSI=-.0 DEG CONFIGURATION F
V=150 KNOTS q=68.7 PSF.

RUN 36 POINT 6 ALPHA=-4.0 DEG PSI=-.0 DEG CONFIGURATION F
V=150 KNOTS q=68.7 PSF.

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

RAKE MOUNTING POINT

7475 IN

TABLE V – Continued

RUN 36 POINT 8 ALPHA= 2.0 DEG PSI= -.0 DEG
V=150 KNOTS q= 68.7 PSF. CONFIGURATION F

.96		.98	.98	.88	.98	1.00	1.03
.99		.98	.97	.97	.99	.99	1.00
.97		.98	.99	.99	1.03	1.00	.99
.98		1.01	.95	.95	1.02	.99	
		.95	.82	.88	1.00	1.02	
		.82	.92	.79	1.01	1.04	
		1.00	.93	.84	.85		
.96	1.3 / .1	.65	.58	1.01	1.0 / -.7	1.03	2.6 / -1.0
.97		.97	.99	.75	1.02	.99	
		.88	.78	.92	.96	.85 / -2.8	1.7 / -2.8
.99		.9s	.95	.47	.97	1.02	
1.01	1.6 / -2.0	.2b	.48	.42		2.4 / .7	
1.01	-.2 / 2.1	.85	.55	.99	.96	1.04	
1.01		.8b	.36	1.18	1.02	1.04	
.99		.95	.82	.96	1.01	1.03	
		.98		1.06	1.02		

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE TO RIGHT LOOKING AFT. ←7473IN→

NOTE- TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

RAKE MOUNTING POINT

RUN 36 POINT 7 ALPHA=-2.0 DEG PSI= -.0 DEG
V=150 KNOTS q= 68.7 PSF. CONFIGURATION F

.98		.97	.97	.99	.99	.97
.98		.97	.99	.99	.98	
1.00		.9s	.98	.99	.98	.98
.98		1.00	.98	.98	.97	
.99		1.00	.98	.95	.99	
1.00		.98	.77	.95	.99	.98
1.00		.94	.91	.98	.99	
1.01	-3.0 / -.6	.90	.75	.97	.95	.97
.99		.90	.56	.93	.96 / .1	-2.6 / .1
.92		.83	.81	1.13		
.96		.75	.05	1.01	1.00	1.00
1.02		1.08	.58	1.02	1.04	
.99		.97	.92	.86	1.02	
1.00	-2.5 / -1.7	.92	.78	.38	1.02 / .1	-1.5 / .1
.97	-2.8 / 3.1	.78	.36	1.07	.96	.99
.97		.64	.41	.95	1.01	
1.00		.70	.57	1.03	.99	
.96		1.01		.97	1.01	
.98		.84		.98	.98	

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE TO RIGHT LOOKING AFT. ←7473IN→

NOTE- TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

RAKE MOUNTING POINT

TABLE V - Continued

RUN 36 POINT 9 ALPHA= 4.0 DEG PSI= -.0 DEG
V=150. KNOTS q = 68.7 PSF. CONFIGURATION F

RUN 36 POINT 10 ALPHA= 4.0 DEG PSI=-2.0 DEG
V=150 KNOTS q = 68.7 PSF. CONFIGURATION F

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_P = \frac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT. ← 7473-IN →

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

RAKE MOUNTING POINT

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_P = \frac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT. ← 7473-IN →

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

TABLE V – Continued

RUN 36 POINT 12 ALPHA=-2.0 DEG PSI=-2.0 DEG CONFIGURATION F
V=150. KNOTS q= 68.7 PSF.

.97		.97	.98	.98	.97	.95
.99		.98	.99	.97	.97	.95
.98		.97	.98	.96	.96	.97
		.99	.98	.96	.97	
.99		.98	.98	.96	.97	.98
	−6.1 / −1.1	.67 / .91	.93 / 1.00	.96	.94 / .94	−2.4 / −1.5
.97	−3.1 / −2.2	.79	.99	−1.1 / −2.9	.94 / .97	.99
	1.05 / .92	.70	.74	.56		
.95	.89	.83	.96	.98	.95	.99
	.95	.87	1.12	.57	1.01	
.97	1.05	.83	.51	.34	.98	.98
	.97 / 1.05	.39 / .60	RAKE MOUNTING POINT	.57 / .98	.99 / .99	−1.3 / −.8
1.01	−2.7 / −3.3	.72	.87	.94	−2.6 / −3.3	.97
1.00	1.01	.50	1.08	.94	.95	.96
.99	.99	.61	.42	.99	.96	

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_P = \dfrac{P_l - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE TO RIGHT LOOKING AFT.
7.475 IN

NOTE- TABLE IS SEEN FROM THE FLOW MODEL NOSE, LOOKING AFT.

RUN 36 POINT 11 ALPHA= 2.0 DEG PSI=-2.0 DEG CONFIGURATION F
V=150 KNOTS q= 68.7 PSF.

.99		.97	.94	.95	.97	.95
.97		.96	.95	.97	.98	.97
.97		.96	.94	.95	.97	.97
.98		.99	.93	.96	.98	.98
.96		.97	.94	.93	1.7 / −1.6	.96
.96	.8 / −1.8	.80 / .56	.94 / .92	1.9 / −3.2	1.00 / 1.00	.97
.97	.95 / .64	.90 / .71	1.00 / .59	.97	.67	1.00
.99	.93	.72	.63	.96	.98	.98
1.01	1.05	.88	.92	.81	1.10	2.7 / −.3
.99	.97	.52 / 1.00	.37	.85	.94 / .98	.97
.98	.95 / .98	.91	RAKE MOUNTING POINT	.68	.96	.96
	1.5 / −3.4	.89	.77 / .91	.95	.95	
	.3 / 3.2	.93	.64	.99	1.0 / −3.7	
		.91		.99	.95	
		.89		1.01		

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_P = \dfrac{P_l - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE TO RIGHT LOOKING AFT.
7.475 IN

NOTE- TABLE IS SEEN FROM THE FLOW MODEL NOSE, LOOKING AFT.

TABLE V - Continued

RUN 3b POINT 13 ALPHA= 2.0 DEG PSI= 2.0 DEG CONFIGURATION F
V= 150 KNOTS q = 68.7 PSF.

RUN 3b POINT 14 ALPHA= .0 DEG PSI= -.0 DEG CONFIGURATION F
V= 150 KNOTS q = 68.7 PSF.

RAKE MOUNTING POINT ⊕

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_T - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY
TO RIGHT LOOKING AFT. PLANE

← 7.475 IN →

RAKE MOUNTING POINT

NOTE- TABLE IS SEEN FROM THE FLOW →
MODEL NOSE, LOOKING AFT.

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_T - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT PLANE
TO RIGHT LOOKING AFT.

← 7.475 IN →

NOTE- TABLE IS SEEN FROM THE FLOW →
MODEL NOSE, LOOKING AFT.

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TABLE V – Continued

RUN 36   POINT 16   ALPHA= .0 DEG   PSI= 2.0 DEG
V=150 KNOTS   q= 68.7 PSF.   CONFIGURATION F

RUN 36   POINT 15   ALPHA= .0 DEG   PSI=-2.0 DEG
V=150. KNOTS   q= 68.7 PSF.   CONFIGURATION F

RAKE MOUNTING POINT

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS C_p, $\dfrac{P-P_\infty}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW PLANE
MODEL NOSE, LOOKING AFT.

RAKE MOUNTING POINT

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TABLE V – Concluded

RUN 36   POINT 17   ALPHA= .0 DEG   PSI= 4.0 DEG
V=150. KNOTS   q = 68.7 PSF.   CONFIGURATION F

.99	.97	.98	.97	.96	.98	.98
	.97	.98	.96	.98	.98	
.99	.97	.99	.98	1.01	[.2 / 3.3] 1.00	.97
	.99	.98	.97	.98	1.01	
1.01	.98	.98	.97	.96	1.01	.98
	.99	.98	.97	.91	.95	
.99	.98	.96	.79	.91	.99	.97
	.98	.99	.98	.73	1.02	
1.01	[.1 / 3.0] 1.03	[.1 / 2.9] .92	.77	[-4.3 / 2.5] .83	.81	[-.8 / 4.5] .97
	1.00	.96	.64	.68	.89	
.98	1.00	1.07	.46	.76	.68	.97
	.98	.70	.71	1.03	.96	
.98	.97	.89	.59	1.00	.74	.99
	.98	1.07	RAKE MOUNTING ⊕ POINT	.59	.86	
.99	[-.6 / 2.0] 1.00	[-.6 / 5.4] 1.01		.69 [-3.3 / -.7]	.97 [-.0 / 3.2]	.98
	.95	.97		.87	.99	
1.00	1.00	1.02	.60	.61	.89	1.01
	.99	.96	.44	.56	.89	
.98	.99	.99	1.05	.56	.91	.99

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT TO RIGHT LOOKING AFT.

SURVEY PLANE
◄——— 74.75 IN ———►   RAKE MOUNTING POINT

NOTE- TABLE IS SEEN FROM THE FLOW MODEL NOSE, LOOKING AFT.

TABLE VI. WAKE PRESSURE COEFFICIENTS AND FLOW DIRECTIONS AT TWO
FORWARD SPEEDS AND VARIOUS FUSELAGE ATTITUDES,
CONFIGURATION FH

RUN 7 POINT 6 ALPHA=8.0 DEG PSI=-.0 DEG q = 32.1 PSF. CONFIGURATION FH
RUN 7 POINT 6 V=100. KNOTS

1.01		.96			1.00
.99		.97			.99
.98		.98			.98
.99		.99			
1.00		.99			1.00
1.00		.99			
.99		1.00			1.00
	−8.9 −1.0	.93		−8.7 −.7	.99
.97		1.05			
1.02		.93			.99
.97		1.17			
.97		1.02			
.69		.52	RAKE MOUNTING POINT		
.79		.66		−7.8 −2.6	−7.9 −.1
.97		.64			1.00
.97		.73			1.00
1.02		1.18			
1.00		.72			.96

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_P = \dfrac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

RUN 7 POINT 5 ALPHA= .0 DEG PSI=-.0 DEG q = 32.1 PSF. CONFIGURATION FH
RUN 7 POINT 5 V=100 KNOTS

1.01		.98			.98
1.00		.98			.98
.98		.98			.97
.98		.95			
.98		.95			1.00
.98		.96			
1.02		.93			.96
.99		.60			.99
.22		.90	−.6 −1.3		
1.00		.61			.95
.86		1.16			
.89		1.03			
1.00		.45			.97
.95		.34	RAKE MOUNTING POINT		
1.00		.81		.2 1.5	
.97		.83			.95
.98		1.02			1.01
1.01		.88			
1.03		.98			.96

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_P = \dfrac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

TABLE VI – Continued

TABLE VI – Continued

RUN 7 POINT 9 ALPHA= 8.0 DEG PSI=-.0 DEG CONFIGURATION FH
V=100. KNOTS q= 32.1 PSF.

RUN 7 POINT 10 ALPHA=-4.0 DEG PSI=-.0 DEG CONFIGURATION FH
V=100. KNOTS q= 32.1 PSF.

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P-P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

TABLE VI - Continued

RUN 7 POINT 12   ALPHA= 4.0 DEG   PSI= 4.0 DEG
V= 100. KNOTS   q = 32.1 PSF.   CONFIGURATION FH

RUN 7 POINT 11   ALPHA= 4.0 DEG   PSI=-4.0 DEG
V= 100. KNOTS   q = 32.1 PSF.   CONFIGURATION FH

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P-P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

RAKE MOUNTING POINT

SURVEY PLANE

74.75 IN.

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TABLE VI - Continued

RUN 7 POINT 13 — ALPHA=-4.0 DEG PSI= 4.0 DEG — V=100 KNOTS q = 32.1 PSF. CONFIGURATION FH

.99	.97	[-5.7 / 3.2]			
.97	.98		.94	.98	.98
.97	.99		.97	.98	.97
.97	.98		.94	.96	.99
.76	.99		.97	.98	1.00
.97	1.00	1.11	[-3.9 / 2.5] .46	.98 .99	.97
.98	1.01	.74	.07	.96	1.03
1.01	1.00	.25	RAKE MOUNTING POINT	.53	.43
1.03	1.02	[-5.6 / .4] .82	.48	.45 [-6.4 / -1.1] .80	.35 .77
1.02	.98	.90	.22	.91	.97
1.01	.97	1.00	.72	.54	.90
	.94	.9?		.38	.99

RUN 7 POINT 14 — ALPHA= .0 DEG PSI=8.0 DEG — V=100 KNOTS q = 32.1 PSF. CONFIGURATION FH

.96	1.00	.99	.98	1.00	.99
	.97	.99	.97	.96	1.01
.97	.94	.99	.48	.99	1.00
.96	.95	.98	.49	.98	.99
	1.02	1.03	.49	.99	1.01
.72	.98	1.04	.48	1.03	.98
	.93 [-9.2 / -9.8]	1.01 [-3.1 / -9.9]	.40	1.05 [1.7 / -7.9]	.98
.92	.73	1.07	.55	.94	.99
	.83	1.01	.35	.94	.99
.91	.57	.54	.75	.96	.99
	.55	.45	.73	.93	1.06
.69	.60	1.22	1.06	1.06	1.00
1.05	1.01 [-1.0 / -2.4]	1.01 [1.3 / 4.8]	.04 RAKE MOUNTING POINT	.76	1.03
.98	1.11	.47		.98 [1.2 / -4.9]	.96
	.87	1.12	.46	.97	1.01
.96	1.04	.30	.42	1.01	1.05
	.84	.71	.46	.92	1.00
	.76	.32	.42	.99	1.01
	.60	.65	.92	.98	1.00

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P-P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

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TABLE VI – Continued

RUN 7 POINT 16 ALPHA= .0 DEG PSI= 4.0 DEG
V=100. KNOTS q = 32.1 PSF. CONFIGURATION FH

.97	.96	.98	.96	.99	.98	.9)
.97	.94	.99	.97	.97	.98	.98
.96	.99	.98	.97	.97	1.00	.9.
					.97	
.77	.96	.99	.95	1.02		.98
	.93	.99	.76	.92		
.98	.96	1.01	.70	.67	.99	.99
	-.3 / 2.0	.3 / 1.2	.50	.77 / -.6 / 2.9		-2.3 / 3.2
.95	1.04	1.01	.75	.70	.98	.97
	.93	.61	.39	.62		
.95	.86	.98	.90	.56	.38	
1.01	1.03 / -.3 / 4.7	.97 / -1.1 / 4.7	.91	.38 / -.9 / 3.7	.93	1.01
1.00	.95	.96	RAKE MOUNTING POINT	.77	1.19 / -1.1 / 3.5	.97 / .4 / 3.5
1.00	.98	.95	.65	1.00	1.07	
.99	1.00	1.02	.52	1.06	.99	.99
	1.00	1.0u	.92	.78	.65	.97

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $c_p = \frac{P - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY TO RIGHT LOOKING AFT. PLANE
NOTE- TABLE IS SEEN FROM THE FLOW MODEL NOSE, LOOKING AFT.

RUN 7 POINT 15 ALPHA= .0 DEG PSI=-4.0 DEG
V=100. KNOTS q = 32.1 PSF. CONFIGURATION FH

.99	1.00 / -1.5 / -3.1	.94	1.01	.98	1.1 / -9.6	1.01
1.00	.97	.9A	1.00	.98	1.00	1.00
1.00	.98	.97	.97	1.00	.98	.99
1.00	.99	.98	.98	.99	.95	.99
.78	.97 / -.6	.88	.48	.95	.99	.99
1.00	.86	1.01	.47	.98	1.00 / .3 / -.7	.99 / .7 / -1.7
1.00	.71	.95	.93	.96	1.18	1.01
.59	.59	.94	.81	.90	1.04	1.00
1.00	.79 / -2.8 / -18.6	.94	.43	.94 / .2 / -9.5	.98 / .7 / -1.7	1.00
1.02	.62	.98	.02	.96	.99	1.02
.95	.96 / -.1 / -9.2	.9u	.37	1.05	.97	.95
1.12	.99	.52	.55	.98	1.00	1.00
1.02	1.05	.94	.47	1.06	.99	1.02
1.02	.87	.73	RAKE MOUNTING POINT	1.08	1.00	
	.78	.51	.94	.98	.99	
	.81	.56	.77	.99	1.00	
			.82	1.00	1.02	

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $c_p = \frac{P - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY TO RIGHT LOOKING AFT. PLANE
NOTE- TABLE IS SEEN FROM THE FLOW MODEL NOSE, LOOKING AFT.

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TABLE VI - Continued

RUN 8 POINT 5 — ALPHA= .0 DEG PSI= -.0 DEG
V=150. KNOTS q= 70.5 PSF. CONFIGURATION FH

RUN 7 POINT 17 — ALPHA= .0 DEG PSI= 8.0 DEG
V=100. KNOTS q= 32.1 PSF. CONFIGURATION FH

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS, C_P, $\dfrac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

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TABLE VI - Continued

Left table: RUN 6 POINT 6 ALPHA=4.0 DEG YSI=-.0 DEG V=150. KNOTS q= 70.5 PSF. CONFIGURATION

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{P - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW,
MODEL NOSE, LOOKING AFT.

Right table: RUN 6 POINT 7 ALPHA=2.0 DEG YSI=-.0 DEG V=150. KNOTS q= 70.5 PSF. CONFIGURATION FH

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{P - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW,
MODEL NOSE, LOOKING AFT.

TABLE VI - Continued

Right panel

RUN 8 POINT 9 ALPHA= 4.0 DEG PSI= -.0 DEG
V=150. KNOTS q= 70.5 PSF. CONFIGURATION FH

1.00	1.00	1.02	.98	1.01	.97	.97	.96
	1.00	.98	.99	1.02		.97	.97
.99	.99	.98	.99	.97	.96	.96	
	.98	.90	.85	1.00	.98	.98	
.99	.96	.82	.89	.90	.92		
	.94	.80	.84	.42	.91		
.89	.30	.61	.80	.87	.97		
	.87	.84	.42	.79			
.99	.66 [5.9/-.8]	.83 [.8/1.0]	.63 [.2/-1.9]	1.19	1.05		
	.94	.86	.88	1.10	.95		
1.03	.29	.81	.88	.72	.25		
	.89	1.10	.45	1.01	.75		
.98	.42	.74	.06	1.16	.95		
	1.00	.82 [4.0/-2.6]	RAKE MOUNTING POINT ⊕	.76 [5.9/-3.8]	.86		
1.03	1.06 [2.4/5.6]	.96	.03	1.09	.97	.97	
	1.04	.72	.88	.72	1.00 [4.5/1.3]		
1.01	.95	.77	.03	1.02	1.00	.91	
	.97	.99	.36	.76	1.04		
1.00	1.01	1.00	.29	.88	.98	.97	

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS c_p, $\frac{P_T - P_S}{q}$
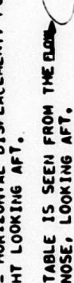
NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW,
MODEL NOSE, LOOKING AFT.

RAKE MOUNTING POINT

Left panel

RUN 8 POINT 8 ALPHA= 2.0 DEG PSI= -.0 DEG
V=150. KNOTS q= 70.5 PSF. CONFIGURATION FH

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS c_p, $\frac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW,
MODEL NOSE, LOOKING AFT.

RAKE MOUNTING POINT

TABLE VI – Continued

RUN 8   POINT 10   ALPHA=-2.0 DEG   PSI=-2.0 DEG
V=150. KNOTS   q= 70.5 PSF.   CONFIGURATION FH

.98	.99	.99	.97	.98	.98
	.99	1.00	.99	.98	
1.00	.96	.95	.99	.97	.97
	.95	.98	.97	.98	
.97	.96	.96	.46	.97	
	.97	.99	.98	.97	
.88	.94	.95	.90	.94	.98
	.89	.95	.76	.97	
.99	.81	.81	.56	.98	.98
	.96	.44	.35	1.07	
.94	.62	.93	.59	.95	.98
	.75	1.07	.77	.93	
.99	.34	1.00	.24	1.16	.97
	.61	1.12	RAKE MOUNTING POINT	.99	
1.01	.51	1.15	.16	1.02	.98
	.97	1.02	.75	.94	
.98	1.03	1.01	.62	.97	.99
	1.01	.98		.98	
.98	1.00	.95		.98	

Boxes (flow direction): -3.3 / -.5 ; -0.9 / -3.9 ; -1.3 / -3.3 ; -1.7 / -3.6 ; -1.7 / -1.8 ; -3.8 / -2.9 ; -6.9 / .6 ; -1.7 / -2.8 ; -.9 / -.5

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS C_p, $\frac{P-P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW,
MODEL NOSE, LOOKING AFT.

SURVEY PLANE   RAKE MOUNTING POINT

RUN 8   POINT 11   ALPHA= 2.0 DEG   PSI=-2.0 DEG
V=150 KNOTS   q= 70.5 PSF.   CONFIGURATION FH

.98	.99	.98	.96	.97	.98
	.98	.96	.98	.98	
.99	.96	.98	1.02	.97	.97
	.98	.98	1.02	.97	
.97	.94	.90	.86	.99	.99
	.65	.91	.88	1.00	
.84	.79	.83	.91	.97	.98
	.91	.76	.75	1.00	
.97	.47	.96	.63	.50	1.00
	.55	.81	.90	.79	
.98	.81	.43	.72	.87	.96
	.51	.87	1.07	.21	
.95	.50	.94	.44	1.10	1.00
	.94	.63	RAKE MOUNTING POINT	.81	
.99	.84	.93	.67	1.01	.99
	1.03	.73	.97	1.05	
1.00	.59	.77	.39	1.01	.98
	.90	.85		.99	
.99	.96	.80		.92	.94

Boxes (flow direction): 1.7 / -1.7 ; 2.0 / -1.4 ; -4.0 / -6.0 ; 2.8 / -3.3 ; 1.3 / -5.3 ; 1.7 / 4.2 ; 2.5 / -.5 ; 3.4 / -3.4 ; 1.0 / -2.7

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS C_p, $\frac{P-P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW,
MODEL NOSE, LOOKING AFT.

SURVEY PLANE   RAKE MOUNTING POINT

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TABLE VI - Continued

RUN 8 POINT 12 — ALPHA= 4.0 DEG — PSI=-2.0 DEG
V=150. KNOTS — q= 70.5 PSF. — CONFIGURATION FH

RUN 8 POINT 13 — ALPHA= 2.0 DEG — PSI= 2.0 DEG
V=150 KNOTS — q= 70.5 PSF. — CONFIGURATION FH

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{P-P_0}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

TABLE VI - Continued

RUN 8 POINT 14 ALPHA= .0 DEG PSI=-4.0 DEG CONFIGURATION FH
V=150. KNOTS q= 70.5 PSF.

RUN 8 POINT 15 ALPHA= .0 DEG PSI=-2.0 DEG CONFIGURATION FH
V=150. KNOTS q= 70.5 PSF.

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

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TABLE VI - Concluded

RUN 8 POINT 17 ALPHA= .0 DEG PSI= 4.0 DEG CONFIGURATION FH
V=150 KNOTS q= 70.5 PSF.

.99		.97	1.01	.98	.98	.97
.99		1.01	.99	.99	.97	.98
.98		1.0n	.93	.94	.97	.95
.89		1.00	1.00	.98	.98	1.00
		1.00	.9A	1.00	.96	
		.94	.9n	.95	.98	.97
1.00		.95	1.01	1.00	.87	
.97		.93	.90	1.08	.95	.90
		.94	.96	.86	.84	.65
		.83	.96	1.03	.93	.69
.97		.97	.6n	.09	.78	.65
		.87	.34	.79	.66	.70
.97		1.02	.81	.84	.34	.82
1.02		1.01	1.07	RAKE MOUNTING POINT	1.13	.99
		1.01	.75		.46	.97
		1.04	.93		.93	1.07
1.01		1.04	.95	.b2	.63	.94
		1.00	1.05	1.01	.78	1.08
1.00		.99	1.03	.90	.23	.80

Boxed flow direction values (RUN 8 POINT 17):
- -.3 / 3.2
- -.8 / 2.7 and .2 / 3.3
- -6.1 / 3.2 and -.8 / 5.9 and .1 / 1.6
- -1.3 / 2.5 and -.3 / -.7 and .6 / 5.4 and .6 / 1.02

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS C_p, $\dfrac{P-P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW MODEL NOSE, LOOKING AFT.

RUN 6 POINT 16 ALPHA= .0 DEG PSI= 2.0 DEG CONFIGURATION FH
V=150 KNOTS q= 70.5 PSF.

.98	.99	.94	.9n	.97	.96	.96
.99	.96	.98	.9)	.95		.96
.99	.97	1.00	.9n	.97	.98	.98
.97	.97	.98	.9A	.97	.97	.97
.89	1.02	1.01	1.04	.97	.99	.98
1.01	1.01	.94	.92	.98	.97	.97
1.00	.91	.91	.74	.95	.94	.94
.98	.86	.77	.45	.72	.91	.95
1.01	1.00	.93	.6n	.54	.79	.9L
1.03	.8H	.01	1.04	.36	.76	.94
1.01	.89	.79	.64	.63	.71	.9i
1.00	.94	.41	1.04	.48	1.02	
	.86	.37	.99	.59	1.01	
	.9A	RAKE MOUNTING POINT	1.00	.80	1.12	
1.03	.90	.H0	.44	1.11	1.05	
	1.04	.5U	.7A	.83	.97	
1.01	1.05	.99	.H0	.79	1.00	
1.00	1.00	.8b	.50	.92	.97	
1.00	1.01	.98	.71	.52	.95	

Boxed flow direction values (RUN 6 POINT 16):
- -.6 / .7 and -3.2 / .8 and .1 / -1.3
- -1.5 / -.1 and -5.1 / 5.4 and .4 / .7
- .6 / 1.5 and -.3 / -1.1 and .4 / 2.1

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS C_p, $\dfrac{P-P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW MODEL NOSE, LOOKING AFT.

TABLE VII. WAKE PRESSURE COEFFICIENTS AND FLOW DIRECTIONS AT THREE
FORWARD SPEEDS AND VARIOUS FUSELAGE ATTITUDES,
CONFIGURATION FHC

RUN 10 POINT 5 V=60 KNOTS — ALPHA= .0 DEG PSI= -.0 DEG q= 11.5 PSF. CONFIGURATION FHC

1.02	1.00	1.01	.99	1.00	.94	.97
1.03	1.02	.98	.96	.95	.95	
1.00	1.02	.97	.97	.97	.96	.97
.98	.98	.97	1.00	1.00	.1 / -1.2 .98	.95
.84	.97	1.00	.98	.97	.98	
1.03	.99	.94	.97	.98	.97	
.97	.93	.89	1.00	.89	.98	
.96	.73	.71	.80	.39	.0 / -4.0 .95	.6 / -.8 .96
1.13	1.05 / -4.2 .5 / -.5 .82	.85	.80	1.00		
1.14	.51	1.00	1.12	.89	.98	
1.02	.47	.97	1.07	.73	.87	
	.88	.30	.49	.63	.86	
	1.08	.45	.85	1.12	1.00	
	1.00	.08	RAKE MOUNTING POINT	.99	.95	.0 / .5 1.01
	.97 / 1.0 3.3 .77	.25	.97	.5 / -3.2 .97		
	.69	.85	.43	.74	.97	
	1.02	.80	.25	1.00	1.00	
	.96	1.03	.43	.60	1.00	
	.99	.94	.59	.85	.98	
.3 / -2.8						

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS C_p, $\frac{P_T-P_S}{q}$.

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT.
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW.
MODEL NOSE, LOOKING AFT.

RUN 10 POINT 6 V=60 KNOTS — ALPHA=-8.0 DEG PSI= -.0 DEG q= 11.5 PSF. CONFIGURATION FHC

.99	.95	1.02	.98	.95	.95	.98
.96	.96	.93	.99	.98	.93	.94
.96	.96	1.00	.99	.96	.92	.94
.98	.97	.93	1.00	.90	.90	.95
.98	.98	1.00	1.00	.94	.95	.94
.84	.98	1.00	.48	.95	.96	.97
-5.8 / .2 .97	.95	.94	.98	.95	-9.2 / -.7 .93	
	.91 / -9.7 / -.5 1.01	.97	.94	.95		.93
1.40	.98	1.01	.92	.95	.97	.92
	1.03	1.01	1.01	.86	.93	
	.54	1.17	1.09	.80	.91	
.95	1.01	.73	.97	.61	.16	.64
1.09 / -10.1 / -4.8	.59 / -22.0 / 3.3 .69	RAKE MOUNTING POINT	.74	.83	-7.4 / -4.2 .97	
	.74	.57	.01	.65	.66	
1.02	.27	.19	.01	.83	.92	.98
	.46	.97	.00	.33	.86	
	.94	.40	.19	.68	.86	
.97	1.01	.81		.72	.93	.94

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS C_p, $\frac{P_T-P_S}{q}$.

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT.
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW.
MODEL NOSE, LOOKING AFT.

TABLE VII – Continued

RUN 10 POINT 7 ALPHA=-4.0 DEG PSI=-.0 DEG
V=60. KNOTS q=11.5 PSF. CONFIGURATION FHC

[-5.5 / 1.3]	[-7.3 / -.6]			[-5.8 / -1.1]	
.97	1.08	.98	.98	.96	.94
.94	.87	.98	1.00	.95	.94
.97	.89	.95	.95	.94	.97
.84	.82	.97	.91	.93	
.97	.54	.93	.90	.94	.97
1.00		.97	.93	.93	
.95	[-4.1 / -3.7]	.97	.95	.91	
	.80	RAKE MOUNTING POINT	.94	.92	[-5.2 / -.4]
	.65	.99	.93	.94	.96
	.85	1.02	.84	.94	.95
		1.05	.57	.87	
		.86	.80	.92	
		.74	.51	.98	
1.11	1.07	.48	.39	.98	[-2.6 / .5]
1.03	1.05	.18	.74	.82	.92
.98	.93	.86	.88	.80	.93

Additional flow-angle boxes: [-5.5 / 3.1], [-7.0 / 1.3]

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS c_p, $\dfrac{P_t - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

RUN 10 POINT 8 ALPHA=4.0 DEG PSI=-.0 DEG
V=60. KNOTS q=11.5 PSF. CONFIGURATION FHC

1.03	[3.6 / .0]	.97	.49	.96	.97
1.00	1.01	.95	1.00	.98	.94
1.01	.97	.97	.97	.94	.95
.86	1.01	.94	.96	.98	
.99	.84	.98	.94	1.00	.98
	.90		.88	1.03	
	.81		.78	.91	
.72			.77	.28	
[2.9 / -2.4]	1.06	[1.3 / 3.9]	.70	.38	[5.6 / -3.9]
.89	.89	1.05	1.00	.63	1.09
.94	.92	.70	.90	.42	.90
	.90	.64	.77	.66	.97
1.01	1.02	.91	.58	1.00	.98
1.17	1.00	1.05	RAKE MOUNTING POINT	.87	1.00
1.11	.98	.70	.44	.70	.98
1.04	1.01	1.03	.29	.99	.96
	1.02	.96	.33	1.04	1.01
	.98	.98		.66	1.01
				.90	1.00

Additional flow-angle boxes: [3.9 / -.9], [4.0 / -.9], [3.4 / -2.3], [-4.4 / -.3]

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS c_p, $\dfrac{P_t - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

TABLE VII – Continued

RUN 10   POINT 9   ALPHA= 8.0 DEG   PSI= -.0 DEG   CONFIGURATION FHC
V= 60 KNOTS   q= 11.5 PSF.

RUN 10   POINT 10   ALPHA= 4.0 DEG   PSI=-4.0 DEG   CONFIGURATION FHC
V= 60. KNOTS   q= 11.5 PSF.

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS c_p, $\frac{p - p_\infty}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

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TABLE VII - Continued

RUN 10 POINT 12 ALPHA=8.0 DEG PSI=-4.0 DEG CONFIGURATION FHC
V=60. KNOTS   q = 11.5 PSF.

RUN 10 POINT 11 ALPHA=-4.0 DEG PSI=-4.0 DEG CONFIGURATION FHC
V=60. KNOTS   q = 11.5 PSF.

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{P_T - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.
NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

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TABLE VII – Continued

RUN 10 POINT 13 ALPHA=-8.0 DEG PSI= 4.0 DEG V=60. KNOTS q = 11.5 PSF. CONFIGURATION FHC

.99	.96	1.01	.98	1.02	.98
	1.00	1.01	1.00	.97	.96
1.01	.98	1.00	1.01	.93	.97
	.99	1.01	1.03	.96	.94
.99	1.01	1.01	1.01	.94	.93
	1.00	1.00	1.06	.99	.95
.85	.93	1.02	1.01	.97	.96
	.98	1.03	.98	.96	.98
1.02	.97	1.05	1.00	.99	.96
	.93	1.00	1.04	1.00	1.28
.98	1.03	.94	1.12	.83	.77
	1.03	.89	.56	.93	.58
.97	1.04	.73	.55	.72	.93
1.11	1.15	.90		.98	.90
	1.10	.52		.65	.77
1.00	1.00	.66		.76	.62
1.07	.90	1.01	.70	.56	.88
	.94	.95	.04	.28	.84
.98	1.02	1.14	.32	.58	.81

Boxes (flow direction, deg):
- −7.4 / 2.8
- −8.6 / 2.2
- −.3 / 3.1
- −5.2 / 5.6
- −.1 / 2.8
- −8.5 / 3.6
- −17.1 / −3.4
- −10.9 / −24.6
- RAKE MOUNTING POINT ⊕

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{p_T - p_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW MODEL NOSE, LOOKING AFT.

RUN 10 POINT 14 ALPHA=-4.0 DEG PSI= 4.0 DEG V=60. KNOTS q = 11.5 PSF. CONFIGURATION FHC

1.02	.98	.98	.98	.96	.93	.97
	.95	.94	1.00	.99	.96
.97	.97	1.01	1.02	.89	.92	.95
	.97	.98	.98	.95	.92
.98	.97	1.01	1.01	.98	.97	.98
	.95	.99	.97	.95	.95
.83	.95	.97	.98	.97	.95	.98
.96	.94	.98	.92	.98	1.00	.96
	.95	.92	.89	.96	.82
	.92	.97	.88	.82	.94
.93	.96	.99	.54	.84	.85	.93
	1.00	1.03	.82	.88	.68
.97	1.02	.58	.48	.81	.68	.96
1.09	.87	.40		.68	.82	.95
	1.04	.75		.52	.95
	1.00	.87		.50	.87
1.01	.95	1.02	.03	.65	.73	.93
	1.03	.94	.48	.83	.68
.97	1.02	.95	1.33	.49	.90	.94

Boxes (flow direction, deg):
- −3.5 / 2.8
- −4.0 / 4.2
- −8.4 / 2.5
- −6.0 / 2.4
- −3.5 / 1.1
- −4.1 / .4
- −8.5 / 3.4
- −5.1 / 2.5
- −1.6 / 2.0
- RAKE MOUNTING POINT ⊕

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{p_T - p_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW MODEL NOSE, LOOKING AFT.

TABLE VII - Continued

TABLE VII - Continued

RUN 10   POINT 17   ALPHA= .0 DEG   PSI=-4.0 DEG
V=60.   KNOTS   q= 11.5 PSF.   CONFIGURATION FHC

.51		.97	.97	.98	.99
				1.0 / -5.2	
.49	1.01	.97	.98	.97	.99
.51	.98	1.00	.92	.95	.99
.3b	.97	.92	.97	.96	.97
	-9.6 / -4.1	.99	.94	.9 / -5.2	
.51	.9b	.95	.93	.94	1.00
		.37	RAKE MOUNTING POINT	.95	.93
.55	-.3 / 3.7	.95	.8b	.96	1.5 / -2.1
.54	1.00	.8b	.15	.95	.95
.54	.68	.41	.95	.94	
		.45	.30	.97	
	-3.6 / -7.2	.97	1.01	.95	-.2 / -3.5
.6u	1.01	.98	.98	.96	1.00
.68	.95	.46	.95	.94	
.53	1.03	1.03	.95	.98	

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS c_p, $\dfrac{p_r-p_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

RUN 10   POINT 18   ALPHA= .0 DEG   PSI= 4.0 DEG
V= 60   KNOTS   q = 11.5 PSF.   CONFIGURATION FHC

1.00	.97	1.00	.99	.97	.96
.97	1.00	.99	.97	.96	.97
.97	.98	1.00	1.00	.95	.95
.82	.99	.96	1.02	.95	.95
	1.03	.97	.97	1.02	
.96	.93	.96	1.02	1.01	-.9 / 2.9
	.91 / -.5 1.3	.82	.86	.78	.91
.95	.90	.91	.00	.73 / -9.7 2.0	.54
	.69	.9.	.80	.56	.38
.95	.98	.91	.02	.43	.61
1.11	.99	.5.	.42	.97	1.14
	.93 / -.7 1.0	.85	.50	.59	.94
1.03	.95	.91	RAKE MOUNTING POINT	.79	1.04
.95	1.02	.97	.94	.76 / -2.0 -1.8	.98
	.97	1.00	1.11	.59	.75
	.98	.94	.9	.89	.97
				.37	.70
				.95	.69

Upper boxes: .9 / 2.2, -1.0 / 5.0, -1.8 / 3.4, 1.2 / 5.2

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS c_p, $\dfrac{p_r-p_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

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TABLE VII - Continued

RUN 11 POINT 5 ALPHA= .0 DEG PSI= -.0 DEG
V= 100. KNOTS q= 31.0 PSF. CONFIGURATION FHC

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS c_p, $\dfrac{P - P_\infty}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE— TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

RUN 10 POINT 19 ALPHA= .0 DEG PSI= 0.0 DEG
V= 60 KNOTS q= 11.5 PSF. CONFIGURATION FHC

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS c_p, $\dfrac{P - P_\infty}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE— TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

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TABLE VII - Continued

RUN 11   POINT   7   ALPHA=-8.0 DEG   PSI= -.0 DEG   FHC
V=100 KNOTS   q = 31.0 PSF.   CONFIGURATION FHC

RUN 11   POINT   6   ALPHA=-8.0 DEG   PSI= -.0 DEG   FHC
V=100. KNOTS   q= 31.0 PSF.   CONFIGURATION FHC

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_T - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE MODEL NOSE, LOOKING AFT.

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TABLE VII – Continued

RUN 11 POINT 8   ALPHA= 4.0 DEG   PSI= -.0 DEG   CONFIGURATION FHC
V= 100. KNOTS   q= 31.0 PSF

Pressure coefficient data array (numbers in table are $C_p = \dfrac{P-P_s}{q}$; numbers in boxes indicate flow direction in degrees):

.97	.98		.98		.98		.98		.97
.97	.97		.99		.96		.96		.97
.98	.99		.99		.99		.99		
				4.0 / -2.1					
						1.05			
.97	.99		.90		.94		.87		.95
.82	.72		.72		.94		.72		
.98	.98		1.02		.89		.90		1.00
.59	.35		.93		.78		**RAKE MOUNTING POINT** ⊕		
1.03	.93		.49		.97		.48		.99
.66	.81		.94		.81		.64		
				3.1 / -2.8					
.97	.97		.61		.86		.60		.97
.79	.89		.89		.48				
				4.5 / -3.2					
.98	.99		.81		.64		.93		.98
1.04	.96		.93		.60				
1.03	.97		1.01		.92		.94		.97
1.00	.98		.90		.98				
				3.0 / -.0					
1.00	1.00		.98		.89		.97		.96
1.01	.99		.54		.94				
				4.0 / 1.6					
.98	1.00		.92		.86		.97		.96
	.85		.26		.92				

Box flow-angle values (upper / lower): 4.0 / -1.0 ; -.0 / -.8 ; 1.1 / -.8 ; 2.7 / -2.0 ; 1.1 / 4.0 ; 4.0 / -2.1 ; 3.1 / -2.8 ; 4.5 / -3.2 ; 3.0 / -.0 ; 4.0 / 1.6

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P-P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

SURVEY PLANE   RAKE MOUNTING POINT   7.475 IN

RUN 11 POINT 9   ALPHA= 8.0 DEG   PSI= -.0 DEG   CONFIGURATION FHC
V= 100 KNOTS   q= 31.0 PSF

Pressure coefficient data array (numbers in table are $C_p = \dfrac{P-P_s}{q}$; numbers in boxes indicate flow direction in degrees):

.97	.96		.98		1.00		.99		1.01		.98
.98	.82		.90		.91		.97		.97		.99
1.01	.96		.74		.86		.70		.98		.97
				6.7 / -.3					**8.7 / -2.2**		
				1.04		1.02		.89		.98	
.83	.62		.74		.74		.69		.98		.99
.99	.83		.94		.76		.82		.97		.97
				3.5 / -.7							
				1.17		.58		.93		.97	
1.03	.88		.71		.43		.81		.95		.99
				1.18		.57		.74		.82	
				9.6 / 2.7					**10.8 / -.6**		
.99	.92		.72		.05		.46		.96		.98
	.84		1.04		.57		.87		1.04	
1.03	1.02		1.04		.56		.98		1.04		
				5.9 / -3.0					**8.0 / -2.4**		
1.02	.98		.78		.34		.90		1.00		
.99	.93		.64		**RAKE MOUNTING POINT** ⊕		.94		.95		.96
	1.04		.84		1.29		1.03				**7.2 / 2.5**
1.03	1.02		.39		.35		.95				
				.99		.58				
1.02	.97		.97		.85		.96				.99
.99	.99		.94		.47		.87				.95
	.98		.96		.48		1.00				

Box flow-angle values (upper / lower): 6.7 / -.3 ; 3.5 / -.7 ; 9.6 / 2.7 ; 5.9 / -3.0 ; 8.7 / -2.2 ; 10.8 / -.6 ; 8.0 / -2.4 ; 5.4 / .1 ; 7.2 / 2.5

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P-P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

SURVEY PLANE   RAKE MOUNTING POINT   7.475 IN

TABLE VII - Continued

Left block

RUN 11 POINT 10 ALPHA= 4.0 DEG PSI=-4.0 DEG
V=100. KNOTS q= 31.0 PSF. CONFIGURATION FHC

.99	-.2 / .0 (box)	.98		.99	.99	1.00		.97
1.00		1.00		.99	.99	.99		.97
1.00		.99	1.01	.91	1.01	.99	5.5 / -4.9 (box)	.98
.98		1.00	1.03	.83	.97	.98		.99
.98		.90	.81		.99	.99		.97
.26		.76	.90		.96	.99		1.00
1.01		1.01	.80		1.00	.97		
.80		.80	.95	.80	.95	1.01	3.0 / -5.1 (box)	.98
1.00	2.6 / -3.4 (box)	.62	.57	.66	1.04	.98		.98
.91		.91	.83	1.16	1.01	.98		
.96		.62	.51	.58	.96	1.02		.99
.45		.45	.94	.47	.35	.98		
.97		1.16	.84	.04	.62	1.04		1.01
1.18		1.18	.41	RAKE MOUNTING POINT	1.00	.99	4.7 / -2.2 (box)	.97
1.06	2.6 / -3.8 (box)	.98	.64	.06	.95	.96		
.58		.58	.92	1.16	1.00	.96		
1.04		.73	.77	.89	1.02	.99		.99
		.63	.94	.35	.98	.98		
1.00		.79	1.04	.78	.97	.98		.95

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{P_T - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

Right block

RUN 11 POINT 11 ALPHA=-4.0 DEG PSI=-4.0 DEG
V=100. KNOTS q= 31.0 PSF. CONFIGURATION FHC

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{P_T - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

TABLE VII – Continued

RUN 11 POINT 12 ALPHA=-4.0 DEG PSI= 4.0 DEG
V=100 KNOTS q= 31.0 PSF. CONFIGURATION FHC

.96	-4.7 / 3.7	.97	.99	1.03	-3.9 / 2.8	.98
.95	.98	1.00	.99	1.00	1.00	.98
.98	.99	1.02	.99	.99	1.01	.98
.35	.99	1.01	.98	1.00	1.00	1.00
.99	1.00	1.02	.96	.97	.98	-5.2 / 2.7	.99
.98	-4.5 / 3.0	.94	1.01	.95	-9.7 / 1.8	.94
.97	1.01	.99	RAKE MOUNTING ⊕ POINT	1.09	1.16	1.01
1.03	.94	1.12	.99	.79	.87	.77
1.03	.91	.69	.46	.91	.71	-3.1 / 2.3	.97
1.00	1.00	.29	.34	.78	.58	1.04
	.72	.90	.79	.26	.95
	1.10	.53	-3.8 / 1.6	.61	-6.8 / 3.5	.77
	.97	.98	.97	.65	1.01	.84
	.97	1.00	.98	1.00	.76	.73
	.98	.75	.98	.76	
	.98	.87	1.00		

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{p-p_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW MODEL NOSE, LOOKING AFT.

RUN 11 POINT 13 ALPHA= 4.0 DEG PSI= 4.0 DEG
V=100 KNOTS q= 31.0 PSF. CONFIGURATION FHC

1.00	1.00	1.00	1.00	1.00	1.01	.99
.99	1.00	.98	.98	1.01	1.01	1.02
.99	.97	1.01	.95	.96	1.00	
.99	.98	.97	.97	1.00	.79	.98
.37	.91	.90	1.05	.93	.99
1.01	5.4 / 3.5	1.03	.62	.88	.86	1.9 / 2.4	.99
1.00	.95	.82	.95	.65	1.6	1.02
.99	.97	.48	.98	.39	1.01
1.03	3.2 / .7	.92	.04	.41	.97	-1.5 / 1.3	1.04
1.03	.98	1.8 / 5.2	.56	.45	.88	4.2 / 3.3
1.01	.98	.78	RAKE MOUNTING ⊕ POINT	1.05	.99
	1.02	.95	.80	1.02	.98
	1.00	.89	1.07	.98	1.2 / .1
	1.00	.56	.83	.58	1.12
		.95	1.08	.85	.30
			.27	.76	.60

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{p-p_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW MODEL NOSE, LOOKING AFT.

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TABLE VII - Continued

RUN 11 POINT 14 ALPHA= .0 DEG PSI=-0.0 DEG
V=100. KNOTS q= 31.0 PSF. CONFIGURATION FHC

RUN 11 POINT 15 ALPHA= .0 DEG PSI=-4.0 DEG
V=100. KNOTS q= 31.0 PSF. CONFIGURATION FHC

RAKE MOUNTING POINT

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{p - p_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW,
MODEL NOSE, LOOKING AFT.

SURVEY PLANE
RAKE MOUNTING POINT
7475 IN

TABLE VII - Continued

RUN 11 POINT 17 ALPHA= .0 DEG PSI= 0.0 DEG
V=100. KNOTS q= 31.0 PSF. CONFIGURATION FHC

RUN 11 POINT 16 ALPHA= .0 DEG PSI= 4.0 DEG
V=100. KNOTS q= 31.0 PSF. CONFIGURATION FHC

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{p-p_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

RAKE
MOUNTING
POINT

TABLE VII - Continued

RUN 12 POINT 6 ALPHA=-4.0 DEG PSI= -.0 DEG CONFIGURATION FHC
V=150. KNOTS q= 69.3 PSF.

.97	.97	.98	.97	.96	.96	-3.8 / -1.3	.98
.97	.98	.9)	.96	.96	.98		.98
.99	.98	.97	.99	.97	.98		.98
1.00	.97	.98	.98	.95	.98		.99
.99	.99	.98	.45	.97	.98		.98
.37	.97	.9)	.98	.98	1.00		.98
.98	.94	.9)	.96	.99	.99	-5.5 / -2.6	-4.4 / -.2	.99
	.95 -5.3/.1	.77	.96	1.02	.96		
	.95 -7.6/-.1	.97	.96	1.08	1.04		
.9b	.91	.84	.99	1.06	1.01		.98
.96	.98	.42	1.08	.80	.79		.99
.9b	.69 -3.8/-2.7	.58 -5.8/.4	.85	.42	.86	-2.8 / 1.2	-3.4 / .4	.99
.99	.52	.54	RAKE MOUNTING POINT .b2	.87	.91		
	.43	.34		.92	.96		
1.00	.69	.28	.04	1.02	.97		.98
	.92	.5n	.32	.96	.98		
.99	.97	.77	.42	1.09	.99		.99
	.91	.84		1.03	1.00		.97
	.99	.7u					

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW. MODEL NOSE, LOOKING AFT.

RUN 12 POINT 5 ALPHA= .0 DEG PSI= -.0 DEG CONFIGURATION FHC
V=150. KNOTS q= 69.3 PSF.

.97	-3/-.4	.98	.98	.99	.2/-1.5	.96	.96
.99		.98	.96	1.00	.97	.97	.97
.99		.99	.98	.97	.97	.97	.97
1.00		1.00	1.01	.96	.98	.98	.98
.99		.99	.49	.96	.98	.96	.96
.39		.89	.85	.88	.96	1.00	.97
1.00	-2.2/3.7	.99 -5.1/-.3	.97	.92	1.00	.3/-2.2	.4/.9	.97
	.76	.7)	1.11	.98	1.01		
1.00	1.06	.83	.94	.60	.80		.97
1.00	.56	.62	.49	.47	.95		.96
1.03	.87	.47	.52	.51	1.01	-2.3/-2.9	.96
	.77	.73	RAKE MOUNTING POINT .75	.78	.88		
1.01	-5/-2.6	1.00	.80	1.26	.97		.96
	.90	.83		.91	1.02		
1.01	.96	.79	.71	.69	.97		.98
1.01	1.03	.61	.49	.74	1.00		
	.99	.8h	.35	.95	.98		
.98	.96	.92		.95	.97		.96

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW. MODEL NOSE, LOOKING AFT.

TABLE VII - Continued

1.00	.99	1.01	1.00	.99	.97	.99
	.99	1.00	1.00	.98	.97	.99
.99	.97	.98	1.00	.96	.97	.97
1.01	.99	1.01	1.00	.99	.97	.97
	1.00	.93	.74	.95		
.51	.94	.91	.94	1.03		
	.88	.94	.75	.73		
1.00	.75 2.5/.5	.82	.73 -3.6/-1.6	.87	.99	.98 2.3/.5
1.03	.36	.88	.80	.88	.68	
	.92	.45	.58	.57	.82	
1.04	1.02	.73	.48	.65	.75	.97
	.97	.54	.29	.47	.53	
1.02	.87	.30	.47	.74	1.06	.98
	1.05 1.3/-2.6	RAKE MOUNTING POINT ⊕	.65 -.3/4.2	.92 1.0/-2.7	.98	.99 2.3/1.5
1.02	1.03	.59	.64	.84	.99	
	1.02	.29	.88	.71	1.01	
1.00	1.00	.45	1.00	1.04	.95	.97
	1.00	.82	.90	.82	.98	
	1.00	.98	.70	1.01	.95	

1.00	.99	.99	.98	.99	.97	.97
	.98	.98	.99	.98	.98	
.98	.98	.98	.97	.97	.97	.96
.99	1.01	1.01	1.00	.98	.97	.98
	1.01	.96	.97	.98		
.49	.95	1.00	.98	1.00		
	.96	.78	.97	.67		
1.00	-2.5/.5	-7.3/-1.2	.78	1.00 -2.7/-2.3	.99	.99 -2.5/-.1
1.00	.74	.97	.80	.93	.95	.97
	.91	.90	.80	.73	.54	
1.00	.66	.74	.63	.31	.88	
	1.04	.91	.94	.93	.63	
1.02	-2.1/-2.5	.58	RAKE MOUNTING POINT ⊕	.43 -2.8/1.0	.86 -1.6/.5	.93
1.01	.92	.70	.46	.66	.95	.99
	1.03	.56	.46	.90	1.15	
.99	.98	.61	.48	.97	1.07	.97
		.97	.57	.99	.99	
		1.00	.59	1.03	1.00	

TABLE VII - Continued

RUN 12 POINT 10 ALPHA= 4.0 DEG PSI=-2.0 DEG
V=150. KNOTS q= 69.3 PSF. CONFIGURATION FHC

.79	1.00		.98	.98	.96	.95	.97
1.00	.97		.9A	1.00	.97	.97	.97
1.00	.98		.97	.99	.97	.96	.97
	.96		.98	.99	.97	.95	.97
1.00	.88		.95	.92	.94	.97	.96
.53	.82		.85	.85	1.01	.97	
	.60		.83	.81	.87	.94	
	.63 [−3.3/−4.9]	.53	.45	.91	1.05	.90	.98 [4.1/−1.2]
.99	.44	.56	.56	.93	.64	
	.92	.71	.56	.65	.96	
1.05	.54	.79	.81	.67	1.00	1.01
	.96	.84	.21	.73	1.03	
.99	.43	.41	.40	.95	.98	.98
1.02 [4.2/−4.6]	.90 [2.6/−7.1]	.42	RAKE MOUNTING POINT	.95	1.13	
	1.13	1.01		1.02	1.04	.98 [4.0/−.0]	1.01
	.69	.72		.96	.98	
1.02	.95	.56	1.08	1.02	.99	.99
	.91	.67	.95	1.03	.99	
1.00	.94	.70	.35	.94	.96	.94

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{P_t - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY
TO RIGHT LOOKING AFT. PLANE
74.75 IN → RAKE MOUNTING POINT

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

RUN 12 POINT 9 ALPHA= 4.0 DEG PSI= -.0 DEG
V=150. KNOTS q= 69.3 PSF. CONFIGURATION FHC

.78	.99	1.00		.98	1.01	.98	.97
.99	.98	1.00		.99	.96	.97	.98
1.00	1.01	1.02		.97	.99	.95	.98
	.99	.80		.89	.97	.96	
1.01	.89	.60		.88	.92	.96	.98
.55	1.03	.77		.90	.97	1.02	
	.97	.85		.83	.70	.97	
	.74	.43		.08	.86	.93	.97 [3.9/.1]
1.01 [3.9/−.7]	.93 [.6/−2.6]	.72	.73	.93		
	.92	.71	1.03	.93	1.01	
.98	1.05	.82	.74	.47	.77	1.00
	.89	.70	.78	1.14	.92	
.99	1.03	.41	.31	.97	.96	1.00
1.02 [3.0/−2.6]	1.03 [1.6/3.7]	.94	RAKE MOUNTING POINT	.82	.97	1.00 [4.2/1.4]
	.99	.91		.87	1.05	
	.93	.85		.95	1.02	
1.01	1.00	.65	.47	.84	.98	1.00
1.01	1.01	.92	.76	.91	.94	
1.01	1.03	.70	.07	1.03	.97	.95

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{P_t - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY
TO RIGHT LOOKING AFT. PLANE
74.75 IN → RAKE MOUNTING POINT

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

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TABLE VII – Continued

Left table:

RUN 12   POINT 11   ALPHA= 2.0 DEG   PSI=-2.0 DEG
V=150. KNOTS   q= 69.3 PSF.   CONFIGURATION FHC

Right table:

RUN 12   POINT 12   ALPHA=-2.0 DEG   PSI=-2.0 DEG
V=150. KNOTS   q= 69.3 PSF.   CONFIGURATION FHC

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{p_T - p_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE– TABLE IS SEEN FROM THE FLOW,
MODEL NOSE, LOOKING AFT.

TABLE VII - Continued

RUN 12 POINT 13 ALPHA= 2.0 DEG PSI= 2.0 DEG
V= 150 KNOTS q= 69.3 PSF. CONFIGURATION FMC

.84	.99		.99	.97		.98
	1.02		1.02	.97		.97
.99	.99		.9b	.96		.97
	1.00		.98	.94	1.b	.98
1.00	.97		1.04	.89	1.b	
	.96		.80	.89		.98
.59	.98		.6n	.99	.9 / .2	
	.93	1.4 / -3.0	.71	.8	1.02	
1.01	.70		.71	1.04	.89	.95
.97	.95		.5z	.8	-.7 / 1.3	
	.88		.85	.43	.96	.96
1.02	.80		.65	.o7	.94	
	.57		.6u	.53	1.16	
1.01	1.13	1.1 / 4.2	.3n	RAKE MOUNTING POINT	1.05	.95
	1.00		1.1u		.89	2.4 / 3.1
1.01	.95		.78		.77	
	.97		.9s	.51	-2.8 / 1.u0	
.98	.96		.97	.41	.99	.95
	.96		.93	1.u2	.96	
					.95	

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS Cp = ...

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

RUN 12 POINT 14 ALPHA= .0 DEG PSI=-?.0 DEG
V= 150 KNOTS q= 69.3 PSF. CONFIGURATION FMC

.79				.97	.96	.98
	.99		.9H	.98	.99	.97
.99	.98		.98	.98	.97	.97
	.96		.98	.97	.97	.97
.5b	.97		.98	.99	.99	.96
	.95		.9b	.97	.97	
	.79	-.5 / -4.1	.92	.98	.99	.99
1.03	.57	-14.1 / -7.4	.93	.85	.97	.3 / -3.4
	.83		.84	.84	.85	.99
.88	.87		.3b	.90	.80	
	.49		.83	1.03	1.06	
1.03	.89		.5v	.59	.63	.98
	.29	-.7 / -5.9	.55	.41	.51	
1.03	.71	-2.6 / 2.8	.92	RAKE MOUNTING POINT	.94	1.1 / -2.0
	.93		.3v		.95	.98
.99	1.11		.64	.78	.96	
	1.07		.44		1.01	
.98	.74		.73	.9u	1.02	.98
	.76		.85	.66	.96	.95

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS Cp = ...

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

TABLE VII - Continued

RUN 12 POINT 15 ALPHA= .0 DEG PSI=-2.0 DEG
V=150. KNOTS q= 69.3 PSF. CONFIGURATION FHC

RUN 12 POINT 16 ALPHA= .0 DEG PSI= 2.0 DEG
V=150. KNOTS q= 69.3 PSF. CONFIGURATION FHC

$$C_p = \frac{P_T - P_S}{q}$$

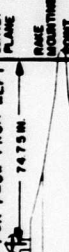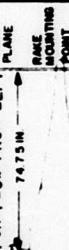NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

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TABLE VII - Concluded

RUN 12   POINT 17   ALPHA= .0 DEG   PSI= 4.0 DEG
V= 150. KNOTS   q= 69.3 PSF.   CONFIGURATION FHC

.85	.99	1.00	1.01	.98	.96	.98
	.99	.98	1.03	1.00	.96	
1.01	.99	1.02	.99	.98	.99	.97
	1.00	.99	1.02	.97	.95	
.97	.97	1.02	1.04	1.00	.96	.97
	.99	1.00	.94	.99	.95	
.38	.97	1.07	.92	.95	1.00	.97
	.98	.95	.54	.81	.87	
.97	.97	.90	.72	.88	.81	.99
	.95	.94	.81	1.01	.81	
.98	1.05	.92	.95	.74	.85	.98
	1.03	.70	.59	.69	.59	
.99	.98	.62	.78	.83	.53	.96
	1.01	1.09		.96	.77	
1.00	.91	1.09		.38	.81	1.03
	1.02	1.11		1.10	1.06	
1.01	1.00	.68	.83	.86	.90	.98
	1.00	.99	.43	.93	.85	
1.01	1.03	1.00	.74	.72	.92	.96

Boxes: .8/3.3 ; -.5/2.8 ; -.9/3.2 ; -9.2/1.5 ; .1/1.6 ; .3/1.4 ; -.8/4.7 ; -1.3/.9 ; -.1/4.7

RAKE MOUNTING POINT ⊕

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{P-P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

74.75 IN.   SURVEY PLANE   RAKE MOUNTING POINT

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TABLE VIII. WAKE PRESSURE COEFFICIENTS AND FLOW DIRECTIONS AT THREE
FORWARD SPEEDS AND VARIOUS FUSELAGE ATTITUDES,
CONFIGURATION FHf

RUN 21   POINT 5   ALPHA= .0 DEG   PSI= -.0 DEG
V=60. KNOTS   q= 11.5 PSF.   CONFIGURATION FHf

RUN 21   POINT 6   ALPHA=-8.0 DEG   PSI= -.0 DEG
V=60. KNOTS   q= 11.5 PSF.   CONFIGURATION FHf

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{P_1 - P_2}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{P_1 - P_2}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE
MODEL NOSE, LOOKING AFT.

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TABLE VIII - Continued

RUN 21   POINT 7   ALPHA=-4.0 DEG   PSI= -.0 DEG
V= 60 KNOTS   q= 11.5 PSF.   CONFIGURATION FH1

.98	.94	1.00	.99	.99		.96	.94
.95	.95	1.01	.99	1.00	[-3.8 / -2.3]	.94	.94
.95	.94	.99	.97	.93		.95	.95
1.00	.96	1.01	.97	.91		.94	.96
1.00	1.00	1.01	.99	.87		.90	.94
1.00	1.00	.96	1.00	.90		.92	.90
1.01	[-8.0 / -.5]	1.00	1.06	.93	[-6.8 / -2.5]	.96	.92
.94	[-10.0 / -2.3]	.94	1.01	.99		.96	.89
.90	.95	.97	.98	.72		1.06	.92
1.12	[-2.2 / -.9]	.69	.82	.43	[-3.6 / -.7]	.92	[-2.3 / .2]
1.02	.64	.36	.66	.21	.51	.92	.94
.95	.80	.56	1.00	1.00	.56	.84	.93
	.25	.85	RAKE MOUNTING POINT	.87	1.16	.93	.90
	.85	.97	.58	.86	1.00		
	.96	.58	.40				

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS C_p, $C_p = \dfrac{P - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION, IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

RAKE MOUNTING POINT — SURVEY PLANE — 7.475 IN

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL HOSE, LOOKING AFT.

RUN 21   POINT 8   ALPHA= 4.0 DEG   PSI= -.0 DEG
V= 60 KNOTS   q= 11.5 PSF.   CONFIGURATION FH1

.97		.97	1.03	1.02	1.05	[4.0 / -2.7]	.89	.90
.93		.98	1.06	1.02	1.05	.90	.90	.92
.94		.94	1.06	1.02	.87	.90	.88	.92
1.00		1.00	1.05	.97	.88	.90	.90	.92
.98		1.01	1.05	1.01	.89	.90	.90	.95
1.01		1.00	1.02	1.02	.62	.89	.89	.90
.97	[5.1 / 1.7]	.97	1.10	1.00	.95	.91	[5.7 / -.9]	.92
1.12		.96	[.6 / -.6]	.85	.81	.84	.90	.90
1.02		.91	.62	.70	.56	.90	.84	.87
.97	[4.0 / -2.5]	.87	.80	.65	.56	.97	.88	[5.0 / 2.2]
		.68	.47	1.17	.44	1.00	.97	.92
		.73	.38	.54	.75	.88	.89	.90
		.98	[1.8 / 1.9]	.75	.63	.91	.91	.89
		1.00	.86	[1.31]	.81	1.10		.88
		.99	.76	.65	.63	.92		
		.95	.91	.47	.88			
		1.07	1.00	.58				
		1.03						
		.99						

RAKE MOUNTING POINT — SURVEY PLANE — 7.475 IN

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS C_p, $C_p = \dfrac{P - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION, IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL HOSE, LOOKING AFT.

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TABLE VIII - Continued

RUN 21 POINT 10 ALPHA= 4.0 DEG PSI=-4.0 DEG CONFIGURATION FH?
V=60 KNOTS q= 11.5 PSF.

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_T-P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION, IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE MODEL NOSE, LOOKING AFT.

RUN 21 POINT 9 ALPHA= 8.0 DEG PSI= -.0 DEG CONFIGURATION FH?
V=60 KNOTS q= 11.5 PSF.

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_T-P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION, IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE MODEL NOSE, LOOKING AFT.

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TABLE VIII - Continued

RUN 21 POINT 11 ALPHA=-4.0 DEG PSI=-4.0 DEG CONFIGURATION FH
V=60 KNOTS q = 11.5 PSF.

RUN 21 POINT 12 ALPHA=-8.0 DEG PSI=-4.0 DEG CONFIGURATION FH
V=60 KNOTS q = 11.5 PSF.

RAKE MOUNTING POINT

TAKE MOUNTING POINT

RAKE MOUNTING POINT

74.75 IN

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{P_x - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION, IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{P_x - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION, IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

TABLE VIII - Continued

RUN 21 POINT 13 ALPHA=-8.0 DEG PSI= 4.0 DEG
V= 60 KNOTS q= 11.5 PSF. CONFIGURATION FH†

		.98	.94	.98	.97	.95
		1.01	.96	1.01	.94	.97
.98		1.01	.97	-7.8 / 3.7	.97	.97
.98		.99	.98		.99	.98
1.01		.98	.95	1.01	.99	1.01
1.00		.96	.95	1.00	.96	.99
.98	-7.5 / 3.0	.98	.99	.96	-10.7 / 3.5	-9.6 / 2.4
.99		1.03	.98	.97	1.00 / 1.00	.96
.98		1.01	-8.0 / 2.4	1.02	.96	.97
.97		.98	1.02	1.00	.99	.93
.99		.97	.98	.95	.92	.93
.93		.99	.70	1.21	1.00	.97
.69 / 1.08	-4.1 / 1.4	.93	.72	.55	1.00	-21.3 / 2.0 -5.8 / .5
1.17		.84 / .97	-8.3 / -2.7	RAKE MOUNTING POINT	.67 / 1.08	.53 / .51
1.09		.89		.78	.92	1.00
1.02		.87		.73	.39	
		1.00		.81	.49	
		1.29		.56		

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS C_p, $\dfrac{p_T - p_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW,
MODEL NOSE, LOOKING AFT.

RUN 21 POINT 14 ALPHA=-4.0 DEG PSI= 4.0 DEG
V= 60 KNOTS q= 11.5 PSF. CONFIGURATION FH†

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS C_p, $\dfrac{p_T - p_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW,
MODEL NOSE, LOOKING AFT.

TABLE VIII - Continued

RUN 21   POINT 15   ALPHA= 4.0 DEG   PSI= 4.0 DEG
V= 60. KNOTS   q= 11.5 PSF.   CONFIGURATION FH#

RUN 21   POINT 16   ALPHA= .0 DEG   PSI=-8.0 DEG
V= 60. KNOTS   q= 11.5 PSF.   CONFIGURATION FH#

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION, IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION, IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

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TABLE VIII - Continued

RUN 21 POINT 17 ALPHA= .0 DEG PSI=-4.0 DEG
V= 60 KNOTS q= 11.5 PSF. CONFIGURATION FH1

.97	-2.9 / -.8	.95	.96	.98	.97
.99		1.00	.96	.96	.99
.99		.97	.94	.96	.94
.99		.97	.98	.96	.95
1.02		1.01	.98	.96	.94
		1.01	1.01	1.00	.92
		1.04	1.04	.98	.99
1.03	-1.0 / -.6	-6.9 / -5.8 1.04	1.00	.98	.92
1.03		1.03	.91	.93	.96
		1.04	.91	.94	.94
.96		1.02	.61	.97	.99
		.80	.64	1.10	.92
.91		.79	.79	.74	.73
1.14	-26.9 / -7.6 .28 / .97	.85 / 1.28	.94	.91	.95
1.07		.41	.68	.95	.98
.99		.69	.87	.58	.99
		.96	1.07	.61	.98
.99		1.19	1.03	.70	

RAKE MOUNTING POINT

7.475 IN.

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS C_p. $\frac{P_t-P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE. LOOKING AFT.

RUN 21 POINT 18 ALPHA= .0 DEG PSI= 4.0 DEG
V= 60 KNOTS q= 11.5 PSF. CONFIGURATION FH1

.97	-.3 / 4.3	.93	.98	.96	1.03	.99
.99		.97	.97	.98	.97	-.9 / 2.8 1.01	.99
		.99	1.01	1.00	.99	1.01	1.02
.98		.98	1.01	.99	1.00	.98	.99
		.98	1.02	.98	1.00	.94	.99
.98		.98	1.00	.99	.99	.97	.99
		.97	.97	1.00	1.00	1.05	
	-1.1 / 5.4	-.92	1.00	.98	.96	-7.4 / .5 .70	-1.3 / .6 1.00
		.94	.97	.93	.95	.95	
.98		.95	.81	.98	1.11	.76	1.00
.97		.98	.94	.60	1.12	.69	
		1.18	.40	.34	.68	.52	
.95		1.03	.36	.56	.88	.35	.93
1.08	.6 / .8 -1.3 / 5.6	.98 / .96	.82 / 1.16	RAKE MOUNTING POINT	.54 / .90	-8.2 / 5.9 .83 / .96	.0 / 7.9 .95
1.06		1.03	1.00	.27	.68	.97	1.02
		1.02	1.00	.47	.41	.98	
		1.00	.98		.42	.94	
.98		1.01	1.00	.91	1.25	.99	1.01

RAKE MOUNTING POINT

7.475 IN.

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS C_p. $\frac{P_t-P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE. LOOKING AFT.

TABLE VIII - Continued

Right Panel

RUN 21 POINT 20 ALPHA= .0 DEG PSI= -.0 DEG
V=60 KNOTS q = 11.5 PSF. CONFIGURATION FH?

.98		.98		.97	
	1.2 / 1.8		-.7 / -.9		.97
.95		.95		.98	
.94		.96		.97	
	-6.5 / .3		-1.4 / -4.8		.95
.98		.98		.98	
.92				.92	
	.7 / -4.5		1.1 / -3.0		1.05
1.05	1.00				
1.04					1.04
1.01					1.01

Numeric columns (KNOTS side):
1.00 .99 .94 .96 .97 .98 .94 .80 1.03 .79 .81 .73 .44 .71 .69 .40 1.16 1.06 .96

RAKE MOUNTING POINT ⊕: .95 .99 .96 1.01 .94 .99 .99 .96 1.01 .90 1.16 .55 .55 .46 .37 .65

.95 .97 .97 .97 1.00 .99 .75 .89 .97 .75 .83 .44 .78 .59 .57 1.00 .72 .93 .72

.98 .92 .94 .95 .96 .94 .97 .97 -1.4/-4.8 .94 1.0b .64 .86 .91 .94 .87 .9b 1.00 1.03

.97 .9b .97 .95 -.3/-.b .9b .9b .93 .7/.9 .95 .94

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS C_p, $\frac{p_T - p_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT.   7475IN.

NOTE- TABLE IS SEEN FROM THE FLOW MODEL NOSE, LOOKING AFT.

Left Panel

RUN 21 POINT 19 ALPHA= .0 DEG PSI= 8.0 DEG
V=60 KNOTS q = 11.5 PSF. CONFIGURATION FH?

1.01		1.00	.92		1.01
			-1.3 / 2.1		
1.01		1.00	.99	1.00	
.96		1.03	.9b		.98
.99		.98	.99		
.99		.99	1.01		.98
1.05		.97	.98		
.3/2.3		1.01	.98		.91
.98		1.02	.9b / 1.03	-8.1/5.6	.98
	-78.3 / 4.3				
.99		.94	.8b		.88
1.03		1.02	••••		
1.04		1.05	.79		.99
.99		1.03	.84	1.01	
1.02		1.04	.45		.98
1.1b	1.4/4.1	.99	.33	-6.3/-34.8	.99
1.04	.1/5.0	.99	.65 / .26		
1.01		1.02	.47		.97
1.04		1.03	.67		
1.04		1.0b	.78	.74	
1.05		1.02	.90	.24	1.03

RAKE MOUNTING POINT ⊕

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS C_p, $\frac{p_T - p_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT.   7475IN.

NOTE- TABLE IS SEEN FROM THE FLOW MODEL NOSE, LOOKING AFT.

TABLE VIII – Continued

RUN 22 POINT 6 ALPHA=-8.0 DEG PSI= -.0 DEG
V=100 KNOTS q= 31.6 PSF, CONFIGURATION FHf

.98		.98	.97	.97	.96	.97
.97	.99	.99	.98	1.00	.96	.97
1.01		1.01	.98	.99	.98	.97
.97		.97	.98	.98	.97	.97
.98		.98	.98	.95	.98	.96
.97		.99	.99	.98	.96	.98
.99		.99	.99	.97	.98	.96
1.01	-9.4 / .3	-10.8 / -3.0	.90	.97	-8.3 / -.9	.97
.96		.98	.98	.94	.97	-9.5 / -.9
.99		.99	.98	.98	.97	.97
.99		.96	.92	1.03	.93	
.95		.92	.90	.76	1.08	
1.06		.95	1.00	.86	.89	.98
.72	-6.0 / -.8	-15.7 / 3.7	HAKE MOUNTING POINT	.82	-12.8 / -10.5	-5.8 / -.8
.72		1.08	1.04	.73	.95	.98
.99		1.05	.98	.68	.65	
.67		.63	.40	1.20	.56	.97
.77		1.00	.33	.51	.57	
.74		.78	.51	.79	.97	1.00

NUMBERS IN TABLE ARE PRESSURE COEFFICIENT, TSCp, $\frac{P_T - P_3}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

RUN 22 POINT 5 ALPHA= .0 DEG PSI= -.0 DEG
V=100 KNOTS q= 31.6 PSF, CONFIGURATION FHf

.97	.95	.99	.97	.99	.98	1.00
.99	.97	1.02	.97	.98	.98	
.98	.98	1.02	.99	.98	.97	.99
.98	.98	.99	1.00	.99	1.01	
.99	.98	1.00	.99	.97	.96	.99
	.97	.99	.97	.99	1.02	
1.00	.77 / -3.9 / -.8	.96 / .75	.93	1.07 / -1.2 / -5.1	.93 / -.3 / -1.1	.94
.94	.93	.87	.99	.93	.92	.98
	.99	.79	1.01	.84	.67	
.95	.73	.60	1.01	.59	.81	.98
	.61	.87	.57	.62	.99	
	.73		.96	.48		
1.02	.84 / -.2 / -4.0	.75 / -4.6 / -4.3	HAKE MOUNTING POINT	.69 / .8 / 1.4	.73 / 1.0 / 1.7	.98
	.64	1.00	.87	.56	.94	
1.00	.70	1.03	.60	1.03	.98	.99
	.99	1.04	.55	.89	.93	
.99	.98	.91		.99	.99	
.99	1.00	1.03		.61	.95	.98

NUMBERS IN TABLE ARE PRESSURE COEFFICIENT, TSCp, $\frac{P_T - P_3}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

TABLE VIII – Continued

RUN 22 POINT 8 ALPHA= 4.0 DEG PSI= -.0 DEG
V=100 KNOTS q= 31.6 PSF. CONFIGURATION FH1

RUN 22 POINT 7 ALPHA=4.0 DEG PSI= -.0 DEG
V=100 KNOTS q= 31.6 PSF. CONFIGURATION FH1

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_T-P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW.
MODEL NOSE, LOOKING AFT.

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TABLE VIII – Continued

RUN 22 POINT 9 ALPHA= 8.0 DEG PSI= -.0 DEG
V=100 KNOTS q = 31.6 PSF. CONFIGURATION FHF

RUN 22 POINT 10 ALPHA= 4.0 DEG PSI=-4.0 DEG
V=100 KNOTS q = 31.6 PSF. CONFIGURATION FHF

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION, IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE CLOSE
MODEL NOSE, LOOKING AFT.

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TABLE VIII – Continued

RUN 22 POINT 11 ALPHA=-4.0 DEG PSI=-4.0 DEG
V=100 KNOTS   q= 31.6 PSF.   CONFIGURATION FHI

RUN 22 POINT 12 ALPHA=-4.0 DEG PSI= 4.0 DEG
V=100 KNOTS   q= 31.6 PSF.   CONFIGURATION FHI

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS C_p, $\dfrac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION, IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE– TABLE IS SEEN FROM THE FLOW,
MODEL NOSE, LOOKING AFT.

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TABLE VIII – Continued

HUH 22 POINT 13 ALPHA= 4.0 DEG PSI= 4.0 DEG CONFIGURATION FH
V=100 KNOTS q= 31.6 PSF.

HUH 22 POINT 14 ALPHA= .0 DEG PSI=-8.0 DEG CONFIGURATION FH
V=100 KNOTS q= 31.6 PSF.

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{P_t - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW, LOOKING AFT.
MODEL NOSE, LOOKING AFT.

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TABLE VIII – Continued

RUN 22   POINT 15   ALPHA= .0 DEG   PSI=-4.0 DEG
V=100 KNOTS   q = 31.6 PSF.   CONFIGURATION FHf

RUN 22   POINT 16   ALPHA= .0 DEG   PSI= 4.0 DEG
V=100 KNOTS   q= 31.6 PSF.   CONFIGURATION FHf

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION, IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

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TABLE VIII - Continued

Right table: RUN 26 POINT 5 ALPHA= .0 DEG PSI= -.0 DEG, CONFIGURATION FH

V=150. KNOTS q = 69.1 PSF.

.97		1.00	1.00	1.00	1.00	.98	.98	1.00
	.5 / 1.8						-.0 / -1.8	
.96		.97	1.01	.99	.98	.97	.95	.99
.97		.98	.99	.99	.97	.97	.97	1.00
.96		.98	1.01	1.01	1.03	.97	.98	1.01
.96		.98	.98	.98	.99	.99	.99	.98
.96	-4.3 / .1	1.00	1.00	1.00	.97	1.02	-1.6 / -5.5 1.01	.98
1.06 / .5 .90		1.03	1.04	1.04	.7 / 1.0 .95		
.95		.94	.94	.77	.79			
.57		.75	.94	.89				
.69		.37	1.13	.69	1.11			
.42		.82	.40	.53	.94			
.66 / .5 .88	-2.9 / -5.0 .74	.91	MAKE MOUNTING POINT	.72	.97	
1.01 / -3.7 1.01		1.00	1.05 / 1.0 .51			
1.00		1.03	.71	.44	1.02	.95	
.99		1.02	.99	.50	.97	.94	
.99		.98	.91	.54	1.05	.96	1.00

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS Cp = $\frac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE NOSE, LOOKING AFT.

RAKE MOUNTING POINT

Left table: RUN 22 POINT 17 ALPHA= .0 DEG PSI= 8.0 DEG, CONFIGURATION FH

V=100 KNOTS q = 31.6 PSF.

.96	1.1 / .7	1.00	1.00	1.01	1.01	.99	.97
.94		1.00	1.02	1.01	.97	-.8 / 2.0	.97
.97		1.00	1.00	.96	.98	.96	.96
.98		1.00	.99	.97	.99	.99	.99
.99		1.01	.99	.99	.97	.98	.98
.97		1.01	.98	1.00	.96	.96	.97
.98	2.0 / 2.2	.99	1.05	.97	-6.8 / 8.3 .95 1.03	1.01	.97
.97		1.00	1.03	.97	.96	.71	
.99		1.05	1.00	1.03	.46	.91	.70
1.00		1.00	.82	.56	.86		
1.00		1.04	1.14	.27	.95		
1.04	.2 / -.4	1.00	MAKE MOUNTING POINT	.89	-20.6 / 1.8 .44	..... / 13.1 .61	.57
1.00		1.08	.88	.90	.70		
1.01		1.01	.99	.95	.95	1.00	
1.01		.99	.90	.95	.96		
1.02		.99	.63	.64	1.04		
1.01		1.03	1.22	.96	.23	.94	

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS Cp = $\frac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE NOSE, LOOKING AFT.

RAKE MOUNTING POINT

TABLE VIII - Continued

RUN 26 POINT 6 ALPHA=-4.0 DEG PSI=-.0 DEG CONFIGURATION FHI
V=150 KNOTS   q=69.1 PSF

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW MODEL NOSE, LOOKING AFT.

RUN 26 POINT 7 ALPHA=-.0 DEG PSI=-.0 DEG CONFIGURATION FHI
V=150 KNOTS   q=69.1 PSF

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW MODEL NOSE, LOOKING AFT.

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TABLE VIII - Continued

TABLE VIII - Continued

RUN 26 POINT 10 ALPHA= 4.0 DEG PSI=-2.0 DEG
V=150. KNOTS q= 69.1 PSF. CONFIGURATION FHI

.98	.96	.97	.98	.98	.99	.99	.98
1.00	1.00	.98	.97	.99	.99	.99	.97
.97	.98	.99	.96	1.00	.98	.98	.98
.99	1.01	1.00	.93	1.01	.98	.98	.98
.99	.97	1.00	1.00	.98	.97	1.05	.98
.97 [box 4.8 / .6]	.96	.91	.88	.95	.94	.99	
[box -0.6 / -2.5]	.98	.79	.79	.69	8.3 / -6.4 (box)	4.9 / -2.0 (box)	
.97	.87	.97	.51	.66	1.01	.99	
.99	.82	.92	.49	.95	1.03	1.00	
.04	.39	1.12	.85	.79	1.00		
1.00 [box 2.7 / -9.8]	.51	.64	.82	1.10	.98	5.1 / -.3 (box)	1.01
[box -2.8 / -2.3]	.97	.56	.60	.65	.97	4.7 / -3.2 (box)	1.02
1.00	.54	.54	RAKE MOUNTING POINT	.99	.98	1.01
1.00	1.02	.59	.47	1.01	.98	1.04
1.00	.91	.86	.44	1.04	.98	1.01
	.92	.61		.97	.98	
	.97	.52		1.02	.98	

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_P = \frac{p_n - p_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT.

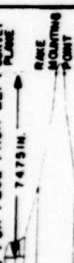NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

RAKE MOUNTING POINT
7475IN

RUN 26 POINT 11 ALPHA= 2.0 DEG PSI=-2.0 DEG
V= 150. KNOTS q= 69.1 PSF. CONFIGURATION FHI

.96	.99	.99	.97	.97	.98	.98		
.98	.97	.97	.98	.97	.97	.97		
.98	1.00	2.5/-3.7 (box)	.98	.98	.97	.96		
.98	1.00	1.00	.99	.98	.96	.98		
.96	.97	.96	1.00	.97	.91	.97		
.98	1.01/1.03 (box 3.6/-8.6)	.71	.91	.91	1.02	.98	-6.6/-2.7 (box)	2.2/1.1 (box)
2.5/-1.9 (box 2.8/.0)	.97	.65	1.02	.90	.91	.77		
1.01	1.00	.87	.86	1.07	.77	.97		
1.02	.92	.33	.66	.89				
1.00	.42	.86	.88	.71				
.99	.92	.90	.83	.91	-10.1/-4.6 (box)	1.2/-8.9 (box)	1.00	
1.04/1.02 (box 2.7/-3.2)	.91	RAKE MOUNTING POINT	.65	.91	.95	1.00		
1.01	.93	.79	.47	.83	.70	.97		
1.00	1.02	.88	.71	.95	.90			
.96	.98	.49	.75	.70				
.99			.55	.90				
1.00			.52	.97				

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_P = \frac{p_n - p_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

RAKE MOUNTING POINT
7475IN

TABLE VIII - Continued

RUN 26   POINT 12   ALPHA=-2.0 DEG   PSI=-2.0 DEG
V= 150 KNOTS   q = 69.1 PSF.   CONFIGURATION FHI

RUN 26   POINT 13   ALPHA= 2.0 DEG   PSI= 2.0 DEG
V=150 KNOTS   q = 69.1 PSF.   CONFIGURATION FHI

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{P_T - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION, IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW,
MODEL NOSE, LOOKING AFT.

TABLE VIII - Continued

RUN 26 POINT 14 ALPHA= .0 DEG PSI=-4.0 DEG
V= 150 KNOTS q= 69.1 PSF. CONFIGURATION FHI

.07	.97	-1.4 / -.0	.95	.98	.96	.99
.98	.98	-9.0 / -6.4	.96	.97	.97	.99
.97	.97		.97	.98	.96	.99
.98	.98		.96	.94	.97	1.00
.99	.98		.99	.96	.97	.8 / -3.6
.97	1.00		.96	.97	.99	.99
1.00	1.00		.94	.99	.98	.99
1.00	.97	-1.1 / -11.3	1.04	.98	1.4 / -5.9	1.00
1.01	.79		.99	.80	1.00	1.00
.94	.94	-26.0 / .1	.99	1.00	1.00	1.00
1.01	.74		.89	.41	.98	1.9 / -2.2
.95	.73		.78	-.00	.97	1.00
.95	.49		.63	.81	1.02	1.00
1.01	.55		.73	RAKE MOUNTING POINT	.78	1.3 / -4.7
1.01	.57		.73		.91	.97
.99	.62		.73		.85	.93
1.01	.76		.82	.81	.99	.93
.99	.94		.93	.71	.97	.97
.79		.78	.32	.96	.99	
				.98	1.01	

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_t - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION, IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE TO RIGHT LOOKING AFT.

RAKE MOUNTING POINT

NOTE- TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

RUN 26 POINT 15 ALPHA= .0 DEG PSI=-2.0 DEG
V= 150 KNOTS q= 69.1 PSF. CONFIGURATION FHI

.98	.99	-.2 / 1.2	.98	.96	.97	.98
.94	.98		.98	.97	.98	.98
.98	.97		.97	.98	.98	.97
1.00	1.00		.98	.98	.99	.97
.98	.99		.98	.98	.97	.95
.98	.96		.95	.98	.97	.4 / -3.5
.98	.89	-.3 / -9.5	.99	.99	.97	.96
1.01	.95	1.02	.97	1.04	.95
.98	1.00	.96	.95	1.0 / -2.8	.96
1.01	.69	.92	1.11	.76	.95
1.01	.78	.85	.61	.57	.97
.98	.56	.97	.89	.73	.3 / -2.8
	.65 / .68	1.10	.40	.99	.97
	.74	-5.6 / -6.7	RAKE MOUNTING POINT	1.04	.91
	.92	.84	.53	.97	.94
	1.01	1.03	1.05	1.02	.97
	1.00	.85	.96	.94	.99
		.77			
		.88			
		.66			

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_t - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION, IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE TO RIGHT LOOKING AFT.

RAKE MOUNTING POINT

NOTE- TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

TABLE VIII - Concluded

RUN 26 POINT 17 ALPHA= .0 DEG PSI= 4.0 DEG
V= 150. KNOTS q= 69.1 PSF. CONFIGURATION FHf

RUN 26 POINT 16 ALPHA= .0 DEG PSI= 2.0 DEG
V= 150 KNOTS q= 69.1 PSF. CONFIGURATION FHf

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_T - P_\infty}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

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TABLE IX. WAKE PRESSURE COEFFICIENTS AND FLOW DIRECTIONS AT THREE
FORWARD SPEEDS AND VARIOUS FUSELAGE ATTITUDES AND ROTOR
OPERATING CONDITIONS, CONFIGURATION FHB

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UP WASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UP WASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

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TABLE IX – Continued

Right section

RUN 14 POINT 8 ALPHA=4.0 DEG PSI=-.0 DEG
V= 60. KNOTS   q= 11.5 PSF.   CONFIGURATION FHB

.98	.99	1.00	1.05	1.00	1.00	.98
1.02	1.07	1.05	1.08	1.01	1.01	1.02
.98	1.08	1.06	.96	.99	.99	1.02
.94	1.06	1.10	.92	1.03	.94	1.09
.82	.88	1.16	.88	.88	.82	1.08
.95	1.00	1.04	1.00	.70	.95	
1.11	1.1	1.20	1.13	1.15	1.11	
1.10	1.2.3	1.31	1.19	1.22	-7.0 / -1.1	-7.0 / -1.1
1.02 / -3.4	1.25	1.34	.91	.88	1.03	1.14
.82	.75	1.12	.83	.94	.97	1.14
1.01	.56	.71	.83	.99		
1.13	.85	.63	.37	.93		1.02
1.13	.89	.70	.33	.80		
1.15	.91	RAKE MOUNTING POINT	.56	.22	-10.4 / -.2	-4.1 / .5
1.09 / 1.3	1.05	.69	.08	.76	1.10	1.00
1.06	.78	.70	.42	.93		
1.05	.76	.69	1.05	.99	1.02	.45
1.06	.94	.90	.81	1.01		
1.04	.70	.57	.97	.91	1.02	.95

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE MODEL NOSE, LOOKING AFT.

Left section

RUN 14 POINT 7 ALPHA=8.0 DEG PSI=-.0 DEG
V= 60 KNOTS   q= 11.5 PSF.   CONFIGURATION FHB

.94	.98	.91	.90	1.02	.94	.98
.96	.94	.95	.98	.99	-7.7 / -1.4	1.03
.92	.92	.95	1.00 / 1.03	.97	.96	
.88	.88	1.00	.98	.93	.95	.95
.93	.93	.89	.98	.84	.93	.88
1.04	1.04	.70	.92	1.02		
1.04	1.04	.90	.93	1.16	1.04	
1.15	1.15	1.14	1.15	1.14	-13.5 / -1.4	1.33
1.32 / -3.8	1.42 / -3.1	1.11	1.22	1.06	1.03	1.00
1.14	1.14	1.02	.98	1.15		
1.10	1.00	.87	1.01	1.02	1.10	1.00
1.05	1.05	.60	.82	1.15		
.91	.91	.92	.44	.87	.91	1.07
.97	.97	.71	RAKE MOUNTING POINT	.33	-2.4 / -.5	1.25
1.16 / 1.5	.96	.50	.08	.73	1.16	
1.07	1.07	.72	.48	1.01		
1.09	1.09	.68	.45	.85	1.09	1.05
1.16	1.16	.58	.41	.86		
1.00	1.01	.60	.48	.63	1.00	.99

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE MODEL NOSE, LOOKING AFT.

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TABLE IX – Continued

RUN 14 POINT 10 ALPHA= 8.0 DEG PSI= -.0 DEG
V= 60. KNOTS q= 11.5 PSF. CONFIGURATION FHB

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS, $C_p = \dfrac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.
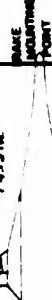
NOTE– TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

RAKE MOUNTING POINT

RUN 14 POINT 9 ALPHA= 4.0 DEG PSI= -.0 DEG
V= 60. KNOTS q= 11.5 PSF. CONFIGURATION FHB

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS, $C_p = \dfrac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE– TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

RAKE MOUNTING POINT

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TABLE IX - Continued

RUN 14 POINT 11 ALPHA= .0 DEG PSI=-0.0 DEG CONFIGURATION FHB
V= 60. KNOTS q= 11.5 PSF.

RUN 14 POINT 12 ALPHA=-8.0 DEG PSI=-4.0 DEG CONFIGURATION FHB
V= 60. KNOTS q= 11.5 PSF.

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_t - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

RAKE MOUNTING POINT

SURVEY PLANE

RAKE MOUNTING POINT

7475 IN.

TABLE IX – Continued

RUN 19 POINT 16 — ALPHA= 4.0 DEG — PSI=-4.0 DEG
V= 60 KNOTS q = 11.5 PSF. CONFIGURATION FHB

.99	.98	1.06	.98		.90	1.10	1.13
.95	.00	1.27	.92		.82	.96	.88
1.00	.89	.83	.78		.93	.90	
.77	.99	.93	.91		.93	.93	.99
	1.29	.96	.74		.89	1.40	
	1.09	1.21	.60		1.18	1.19	
	1.27	1.27	.44		1.10	.95	1.24
.99	1.05	.58	.86		1.02	1.05	
	.47	.43	1.12	[2.1 / -2.2]	.78	.91	[-1.3 / -1.8] 1.02
1.15	.81	.33	.95		1.04	.77	
.98	.59	.93	1.02		.21	.67	.99
	.01	.64	.73		1.04	1.05	
	.57	1.05	.92		.56	.91	1.05
1.09	RAKE MOUNTING ⊕ POINT	1.04	.99	[-2.7 / 3.3]	.93	1.00	[2.0 / -.1]
1.03	1.04	.85	1.02	[-2.2 / -2.7]	1.00	1.01	.96
	.09	.93	.96		.92	.98	
	1.04	1.20	.66		.98	.97	.47
	.09	.72	.92		.95	.94	
.90	.80	.83	.81		.97	1.02	.98

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW.
MODEL NOSE, LOOKING AFT.

RUN 19 POINT 13 — ALPHA=8.0 DEG — PSI=-4.0 DEG
V= 60 KNOTS q = 11.5 PSF. CONFIGURATION FHB

.98	.99	1.00	1.05	.92	.96	.97
.95	.94	1.01	1.01	.97	1.00	.98
	.98	1.03	.98	.98	.99	
	.98	1.04	.42	.89	1.04	
.91	1.03	1.07	.99	.77	.99	.85
	1.05	.94	.99	.92	.95	
.94	1.03	.73	1.13	1.09	.79	1.05
	1.43	1.42	.97	1.27	.96	
1.17	[−13.1 / −8.8] 1.41	1.27	1.06	[−11.3 / −5.4] 1.11	.93	[−14.2 / −4.9] 1.18
	1.06	1.26	1.8	1.02	.86	
.97	1.04	.96	1.11	.94	.96	.99
	1.01	.73	.99	1.01	1.16	
.95	.75	.78	.35	1.00	1.19	1.28
1.15	[−12.5 / −1.7] .64	.45	RAKE MOUNTING ⊕ POINT	1.04	1.26	[−7.7 / −1.4] 1.15
	[−17.8 / −20.2] .99	.40	.72	.59	1.00	
	.04	.52	.8	.95	1.09	
1.17	.65	.42	.72	.94	1.00	1.02
	.76	.18	.32	.59	.98	
.98	.79	.33	.49	.93	.98	.96

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW.
MODEL NOSE, LOOKING AFT.

TABLE IX - Continued

RUN 14 POINT 17 — ALPHA= 4.0 DEG — PSI= 4.0 DEG — CONFIGURATION FHB — V= 60 KNOTS — q= 11.5 PSF.

.95	.99	-.7 / .9	.9,	.96	.96	1.04	.99
	.97		.9,	.89	1.11	1.39	
.99	.96		1.00	.94	1.06	1.01	.83
	.82		1.12	1.09	.94	.94	
.78	.75		.3,	1.12	.74	.75	.85
	1.13		.63	.45	.79	.94	
.83	.95		.9,	.45	.72	.76	.80
	1.03		.9,	1.23	.56 / -.8 / 2.9	-3.7 / 4.5	1.01
.98	.91 / -5.1 / 4.1		.8,	.74	.62 / -4.3 / 1.9	.77	.91
	.94		.5,	1.09	.47	.67	
1.00	1.02		.8,	.98	.89	.64	1.02
	1.03		.5,	.55	.58	1.12	
.99	.96		1.0,	.63	.45 / -1.9 / -4.0	.85	1.02
	.94		.4,	RAKE MOUNTING POINT ⊕	1.06	.79	
1.12	.90 / -1.0 / 3.1		.9,		.72	.80 / 2.0 / 4.2	.98
	.96		.9b		.96	.64	
1.01	1.05	.5 / .2	1.05	1.02	.92	.91	.44
	1.05		1.02	.72	.87	.56	
.95	1.01		1.0,	.74	.68	.55	.94

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT.   .7475 IN

NOTE- TABLE IS SEEN FROM THE FLOW. MODEL NOSE, LOOKING AFT.

RAKE MOUNTING POINT

RUN 14 POINT 18 — ALPHA=-4.0 DEG — PSI= 4.0 DEG — CONFIGURATION FHB — V= 60 KNOTS — q= 11.5 PSF.

.93	.97	-8.3 / 1.7	.9,	.97	.94	.98	.96
	.94		.97	.96	.96	.95	
.93	.98		.92	.93	.95	.90	.95
	.96		.9,	.89	.97	1.02	
.89	.95		.9,	.96	.99	1.07	1.00
	.84		1.00	.95	1.09	1.16	
1.01	1.06		1.00	1.08	.98	1.05	1.14
.97	.93 / -9.0 / -1.0		1.01	.96	1.16 / -9.0 / -1.5	1.23 / -9.0 / 1.1	.94
	.93		1.21	1.16	.93	1.13	
1.07	.95		1.07	.83	.74	.79	1.05
	.95		1.04	.85	.91	.71	
.90	1.00		.94	.90	.53	.62	.98
1.08	.96 / -5.2 / .3		1.02	.43	.77 / -20.0 / 4.8	.92 / -7.3 / .0	.47
	.93		.2,	RAKE MOUNTING POINT ⊕	1.00	.65	
1.01	.96		.87 / -15.1 / 4.0	.48	.49	.63	.95
	.95		.92	.58	.17	.93	
.96	1.00		1.02	.51	.61	1.15	.88
	1.02				1.18	1.02	
					.86	1.08	

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT.   .7475 IN

NOTE- TABLE IS SEEN FROM THE FLOW. MODEL NOSE, LOOKING AFT.

RAKE MOUNTING POINT

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TABLE IX - Continued

RUN 14 POINT 20 ALPHA=8.0 DEG PSI= 4.0 DEG
V= 60. KNOTS q= 11.5 PSF. CONFIGURATION FHB

.95	.96	.95	1.09	.96	.96	.95
.95	.93	.92	.94	1.00	.93	1.00
.94	.91	.96	.98	.98	.98	.96
.92	.94	.93	.95	.99	.96	.94
	.97	.96	1.12	1.04	.94	.99
	1.06	.99	1.12	1.07	.89	.87
.97	1.00	.98	1.01	1.03	[-10.2 / -1.1]	[-10.8 / 3.1]
	1.14 [-12.9 / 1.5]	.89 1.01	.78	1.05	1.07	1.08
1.06	1.18	1.27	1.06	1.30	1.21	1.06
	1.17	1.20	1.52	1.21	1.22	1.15
.93	.94	1.15	1.11	1.06	1.13	
		.98	.43	.96	[-12.5 / -1.9]	[-10.8 / 3.1]
.93 [-1.5 / 1.8]	1.08 [-1.1 / -.3]	1.02	RAKE MOUNTING POINT	1.01	1.00	1.11
	.79 .55	.75	.59	.93	.98	1.03
.93	.09	.04	.57	.97	.97	.92
.96	.04	.48	.29	1.03	1.10	

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW MODEL NOSE, LOOKING AFT.

RUN 14 POINT 19 ALPHA=8.0 DEG PSI= 4.0 DEG
V= 60. KNOTS q= 11.5 PSF. CONFIGURATION FHB

.98	1.01	1.05	.98	.95	.98	.98
.97	1.04	1.06	.98	.90	.93	
.95	.97	1.01	.85	.89	[-10.4 / .7]	
.95	1.00	.47	.93	.86	.93	.92
1.02	.95	.85	.99	.93	.89	
1.05	1.05	.97	1.07	1.04		
1.09	1.11	1.06	1.14	1.14		.52
1.25	1.04	1.14	1.16	.95 [-15.8 / 1.1]	1.13	
[-16.8 / -.4] 1.23	1.43	1.15	1.49	1.18	1.20	.95
1.03	1.38	1.07	1.32	1.03	.91	.99
1.10	1.15	1.13	.80	.67		
1.05	.95	.44	.83	.69		.57
1.06	.96	.95	.61	.59 [-18.9 / 4.5]	[-6.0 / .3]	
[-10.4 / 3.6] .99	1.00	RAKE MOUNTING POINT	.63	.63	.88	.86
1.18 [-9.6 / -3.1]	1.02	1.00	.32	.62	.80	
1.04	1.18	.04	.34	.88	.91	.92
.97	1.06 1.02 1.14	.76	.91	.66		

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW MODEL NOSE, LOOKING AFT.

TABLE IX - Continued

RUN 15 POINT 5 ALPHA= .0 DEG PSI= -.0 DEG
V= 60 KNOTS q= 11.5 PSF. CONFIGURATION FHB

RUN 19 POINT 21 ALPHA= .0 DEG PSI= 0.0 DEG
V= 60 KNOTS q= 11.5 PSF. CONFIGURATION FHB

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{p_T - p_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

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TABLE IX – Continued

RUN 15 POINT 6 ALPHA=8.0 DEG PSI=.0 DEG CONFIGURATION FHB
V= 60 KNOTS

RUN 15 POINT 7 ALPHA=8.0 DEG PSI=-.0 DEG CONFIGURATION FHB
V= 60 KNOTS

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UP-WASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

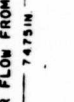NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UP-WASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

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TABLE IX – Continued

RUN 15   POINT 9   ALPHA= 4.0 DEG   PSI=-.0 DEG
V= 60. KNOTS   q= 11.5 PSF.   CONFIGURATION FHB

1.95	.98	1.00	.95	.91	1.00	.87
	.94	.95	1.00	.88	.60	
.98	.95	1.00	1.10	1.10	.98	.90
	.80	.74	.95	.81	.72	
.92	1.02	.50	.56	.86	1.19	1.20
	1.01	.82	.90	.96	.65	
1.06	.77	.95	.65	.75	.95	1.05
	.75	.50	.52	.94	.64	
.96	.95	.64 [−5.4 / 1.0]	.86	.57 [−1.7 / 1.1]	1.02	.94 [2.6 / 1.1]
	.95	1.05	.72	.52	1.05	
.98	.95	.91	.03	.43	.95	1.01
	1.04	.43	.90	.76	.64	
.97	.99	.74	.84 RAKE MOUNTING POINT ⊕	1.09	1.06	1.01
1.11	1.01	.93 [.6 / 4.1]	.50	1.00 [2.7 / −4.3]	1.03	1.01 [2.6 / 1.1]
	.98	.50	.82	.41	1.02	
1.02	1.01	.70	.51	.99	.95	.99
	1.02	.97	.52	.97	1.09	
1.02	1.04	1.00	1.05	.96	1.00	.95

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P-P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.   ←— 74.75 IN —→   RAKE MOUNTING POINT   SURVEY PLANE

NOTE- TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

RUN 15   POINT 8   ALPHA=4.0 DEG   PSI=-.0 DEG
V= 60. KNOTS   q= 11.5 PSF.   CONFIGURATION FHB

.92	.98 [−6.6 / −.6]	.97	1.01	.95 [−4.8 / −1.9]	.98
.94	.97	.94	.97	.97	.99
1.00	.96	.97	1.03	.99	.97
	.94	1.03	1.02	.93	
1.00	.85	1.02	.89	.85	.97
	.99	.90	.90	1.02	
1.02	.97	1.02	1.07	1.03	1.03
	1.03	1.04	.99	1.04 [−6.8 / −1.6]	1.11
.98	1.00 [−9.0 / −1.2]	.98	1.00	.92	.97
	.99	.58	.82	.64 [−6.7 / −1.0]	1.10
.98	1.03	.61	1.05	.75	1.00
	1.04	1.02	.46	.71	
.80	.93	.70	.56 RAKE MOUNTING POINT ⊕	.49	.93
1.06	.91 [−6.6 / −1.6]	.83 [−10.8 / .5]	.92	.27 [−5.7 / −5.4]	.93 [−5.8 / .1]
	1.02	.70	1.00	.92	1.06
1.05	1.00	.53	.79	.69	1.00
	1.00	.62	.94	.95	.98
1.05	1.00	1.04	1.11	1.06	.97
1.02	1.00	.94	.74	1.06	1.01

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P-P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.   ←— 74.75 IN —→   RAKE MOUNTING POINT   SURVEY PLANE

NOTE- TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

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TABLE IX - Continued

Left Table

RUN 15 POINT 10 ALPHA= 8.0 DEG PSI= -.0 DEG
V= 60 KNOTS q= 11.5 PSF. CONFIGURATION FHB

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW,
MODEL NOSE, LOOKING AFT.

Right Table

RUN 15 POINT 11 ALPHA= .0 DEG PSI= -8.0 DEG
V= 60 KNOTS q= 11.5 PSF. CONFIGURATION FHB

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW,
MODEL NOSE, LOOKING AFT.

TABLE IX -- Continued

RUN 15   POINT 12   ALPHA=8.0 DEG   PSI=-4.0 DEG
V= 60 KNOTS   q= 11.5 PSF.   CONFIGURATION FHB

.96	.92	.99	1.01	.96	1.00
	1.00	.97	1.00	1.01	
.93	.95	1.02	1.01	.99	1.03
	.98	1.04	1.02	.96	
.98	.94	1.05	.96	.89	1.00
	.91	1.00	.84	.92	
.97	.98	.93	1.02	1.06	.91
	1.05	1.10	1.12	1.25	-10.4 / -2.2	.93
	1.10	1.04	1.07	1.09 / -9.3 / -4.3	
	1.77	.92	.98	1.58	
1.24	.93	1.36	1.22	1.24	.99
	1.02	.86	1.04	.87	
.97	.79	.83	.80	.69	.68
	.90	RAKE MOUNTING POINT	.78	1.03	-7.5 / -1.3	1.01
1.01	1.03 / -15.1 / -2.4	1.00 / -21.1 / 3.8	.92	1.08 / -7.3 / -3.5	
	.61	.61	.96	.95	
1.05	.53	.77	.89	.95	.99
	.85	.28	.89	.97	
.97	.56	.40	1.02	1.01	.96

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW.
MODEL NOSE, LOOKING AFT.

RUN 15   POINT 13   ALPHA=8.0 DEG   PSI=-4.0 DEG
V= 60 KNOTS   q= 11.5 PSF.   CONFIGURATION FHB

.98	1.00	.95	.98	.96	.98	.99
	.97	.92	.97	.92	.95	
.95	.99	.94	.92	.99	.98	.98
	.99	.97	.95	.94	1.05	
1.03	1.01	.98	1.00	.87	1.06	1.05
	.92	1.01	.96	1.02	.96	
1.03	1.01	1.06	.74	1.06	.80	.98
1.13	1.03 / -11.1 / -4.9	.97	.91	1.05 / -11.5 / -4.3	.94 / -11.5 / -4.1	1.14
	1.04	1.03	1.06	1.06	.98	
	1.08	1.06	1.01	1.15	.98	
1.03	.92	.86	.91	1.26	1.03	1.04
	.76	.92	.86	.94	1.14	
.98	.62	.65	.86	.94	.95	1.16
1.10	.80 / -20.0 / -2.5	.63	RAKE MOUNTING POINT	.90 / -6.0 / -.9	.84	.97
	.43 / -14.9 / -8.2	.48	.47	.42 / -7.1 / -5.8	.98	
	.35	.44	.25	1.08	1.02	
1.14	.81	.19	.47	.88	.97	1.02
	1.02	.37	.25	.95	.96	
1.04	.32	.55	.86	.98	.99

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW.
MODEL NOSE, LOOKING AFT.

TABLE IX - Continued

Left panel

NUM 15 POINT 14 ALPHA=-4.0 DEG PSI=-4.0 DEG CONFIGURATION FHB
V=60 KNOTS q= 11.5 PSF.

Right panel

NUM 15 POINT 15 ALPHA= 8.0 DEG PSI=-4.0 DEG CONFIGURATION FHB
V= 60 KNOTS q= 11.5 PSF.

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

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TABLE IX - Continued

RUN 15   POINT 16   ALPHA= 4.0 DEG   PSI= 4.0 DEG
V= 60 KNOTS   q= 11.5 PSF.   CONFIGURATION FHB

RUN 15   POINT 17   ALPHA=4.0 DEG   PSI= 4.0 DEG
V= 60 KNOTS   q= 11.5 PSF.   CONFIGURATION FHB

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

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TABLE IX – Continued

Left table

RUN 15 POINT 18 ALPHA=-8.0 DEG PSI= 4.0 DEG
V= 60 KNOTS q= 11.5 PSF. CONFIGURATION FHB

1.01	.97	.96	.94	.94	1.00	.99
1.00	.94	.99	.96	.98	.93	1.00
1.00	1.00	.98	.99	.96	.97	1.00
1.01	.99	.95	.99	.98	.98	1.00
.94	.95	1.00	.92	1.00	1.00	
.94	.99	1.00	.99	1.02	.75
[-12.1 / 1.6] .99	1.03	1.12	1.06	1.04	1.27	
1.15	1.21	[-11.1 / -.6]	1.06	1.10	[-10.6 / 2.2]	[-10.9 / 1.9] .92
1.19	.94	.99	1.09	1.04	1.22	
.90	.90	.98	.89	1.02	.98
.96	.91	.90	.99	.80	
.98	1.03	.87	.95	.51	1.05
	RAKE MOUNTING ⊕ POINT		.92	[-4.3 / 4.2] 1.04
1.16	[-7.6 / 2.5]	[-9.2 / -.9]	.81	[-9.5 / 3.9] .89	
1.19	1.02	.65	.66		
1.07	1.03	.91	1.03	.37	.19	.85
1.01	.94	1.01	.46	.47	.69
.98	.89	.88	1.00	.28	.35	1.14
					.91

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_t - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

Right table

RUN 15 POINT 19 ALPHA=-8.0 DEG PSI= 4.0 DEG
V= 60 KNOTS q= 11.5 PSF. CONFIGURATION FHB

1.06	.95	[-11.7 / 3.1] .97	.96	.99	.98
1.03	.95	1.01	.99	1.01	.95	1.01
1.03	1.01	.99	.97	1.00	1.02
1.03	1.00	.99	.94	1.01	.99	1.02
.94	.95	1.04	.88	1.01	1.01
.94	.95	1.01	.94	.89	.92
.97	1.03	[-9.0 / -.1] .82	1.02	.91	1.05	[-13.1 / 2.6] .75
1.09	1.00	1.04	1.07	1.05	[-8.7 / 2.2] .92
1.17	1.15	1.07	1.12	1.01	1.22
1.03	1.01	1.14	1.21	1.03	.49
.98	1.24	1.14	.93	.66
1.00	.98	.97	1.00	.85	.47	.78
1.17	1.13	[-11.5 / 4.9] .82	RAKE MOUNTING ⊕ POINT	.05	.63	[-18.8 / 6.6] .74	[-10.3 / 1.3] .92
1.06	.86	.71	.72	.58	
1.08	1.08	.98	.98	.47	.33	.68
.95	.85	.71	.61	.73
.99	1.04	.93	.47	.88	.53	1.02
					1.02

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_t - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

TABLE IX - Continued

RUN 15 POINT 20 ALPHA= .0 DEG PSI= 8.0 DEG
V=60. KNOTS q= 11.5 PSF. CONFIGURATION FHB

RUN 16 POINT 5 ALPHA=-4.0 DEG PSI= -.0 DEG
V=100. KNOTS q= 31.7 PSF. CONFIGURATION FHB

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT, SURVEY PLANE
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW MODEL NOSE, LOOKING AFT.

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT, SURVEY PLANE
TO RIGHT LOOKING AFT.
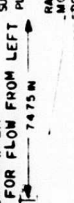
NOTE- TABLE IS SEEN FROM THE FLOW MODEL NOSE, LOOKING AFT.

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TABLE IX – Continued

Right panel

RUN 16 POINT 7 ALPHA= 4.0 DEG PSI= -.0 DEG CONFIGURATION FHB
V= 100 KNOTS q = 11.7 PSF.

.98	.98	1.03	.96	.39	.90	.99
	1.03	.98	.89	.97	1.06	
.76	.98	.89	.87	.99	.99	.92
	.88	.94	.81	.74	1.01	
.96	.78	.69	.60	.97	.86	1.14
	1.03	.89	.66	.79	1.18	.
.90	.73	.62	.53	1.19	.84	.94
	.71	.71	.87	.96	.94	
1.05	[1.1 / -.5]	.80 [-1.7 / 1.3]	.67	.78 [1.7 / .6]	1.17 [3.4 / 1.6]	1.03
	.96	.58	.47	.81	.87	
.98	1.02	.67	.70	.81	.96	.98
	.80	.63	.67	.65	1.05	
.99	1.16	.74	.49	.78	1.02	1.00
	.96	.87	RAKE MOUNTING POINT	1.01	1.00	
1.03	.94 [1.4 / -2.1]	.85 [2.0 / 3.0]	1.09	1.09 [1.8 / -3.1]	.98 [3.5 / 1.8]	1.02
	.99	.73	.84	.84	.95	
1.03	.99	.63	.54	.65	.99	.99
	.91	.96	.62	.75	.99	
.93	.99	.94	.67	.86	1.00	.94

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P-P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT TO RIGHT LOOKING AFT.

SURVEY PLANE
RAKE MOUNTING POINT
7475 IN

NOTE- TABLE IS SEEN FROM THE FLOW,
MODEL NOSE, LOOKING AFT.

Left panel

RUN 16 POINT 6 ALPHA= .0 DEG PSI= -.0 DEG CONFIGURATION FHB
V=100 KNOTS q = 31.7 PSF.

.99	1.02	1.04	.96	.98	.98	1.06
	1.00	1.01	.96	1.07	1.13	
.96	.94	.92	1.03	1.08	.77	.91
	1.02	1.02	.91	.84	1.02	
1.05	1.00	1.03	1.05	1.01	.89	1.09
	.84	.88	.95	.91	1.21	
.87	.98	1.03	.99	.96	.97	.97
	1.00	.81	.87	.89	.99	
1.00	.98 [-4.2/-.8]	.78 [-0.9/-2.7]	.88	.64 [-4.0/.9]	1.24 [-.5/.3]	1.03
	.87	.69	.85	.29	.94	
.97	.86	1.13	.76	.59	.68	.98
	1.02	.94	.93	.94	.55	
.99	.90	.83	.46	.41	.94	1.06
	1.01	.46	RAKE MOUNTING POINT	1.11	.89	
1.04	.95 [-1.9/-1.9]	.29 [-3.7/3.5]	.55	.32 [-1.8/2.0]	.97 [.5/1.3]	.98
	.89	1.03	.37	.66	.86	
1.01	1.06	.90	.01	1.01	1.05	1.01
	.93	.94	.55	.58	1.01	
1.00	1.00	1.01	.37	.48	1.04	.97

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P-P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT TO RIGHT LOOKING AFT.

SURVEY PLANE
RAKE MOUNTING POINT
7475 IN

NOTE- TABLE IS SEEN FROM THE FLOW,
MODEL NOSE, LOOKING AFT.

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TABLE IX – Continued

RUN 16 POINT 9 — ALPHA=-4.0 DEG — PSI=-4.0 DEG — V=100 KNOTS — q=31.7 PSF — CONFIGURATION FHB

1.00	.99	.97	.98	.96	.97	.97
.98	1.00	.98	.95	1.01	-3.0 / -8.8	.97
	.95	.93	.99	.95	.99	.99
.99	1.01	.96	1.03	1.04		.93
	1.00	1.03	.88	.97	1.04	.99
1.02	.89	1.00	.99	.94	.98	
	.98	.95	.02	.95	1.11	.94
1.04	1.02 / -7.7 / -3.3	1.00 / -10.1 / -5.9	1.11	1.04	.83 / -4.4 / -5.3	-4.3 / -3.7 / 1.11
1.00	1.24	.69	.56	.98	1.13	.98
	.85	.49	.95	1.01	.99	
.97	.54	.90	.18	1.11	.98	1.00
	.88	.69	.71	1.18		
1.04	.54 / -9.8 / -2.7	.31 / -12.4 / -1.8	.34	.47	.94 / -3.5 / -4.3	-3.3 / -1.1 / 1.00
1.03	.46	.51	RAKE MOUNTING POINT	.95	1.00	.97
	.72	.73	.43	.71	.99	.99
1.01	.36	.46	.27	.99	.97	.96
	1.06	.51	1.08	.96	.99	
	1.08	.87		.99		
	.93	.96		.96		

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS C_P, $\frac{P_T-P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW. MODEL NOSE, LOOKING AFT.

RUN 16 POINT 8 — ALPHA=8.0 DEG — PSI=-.0 DEG — V=100 KNOTS — q=31.7 PSF — CONFIGURATION FHB

.92	.83	.89	.76	.84	.95	1.12
	.90	.86	.45	.91	1.03	
.98	.94	.72	.73	.79	.83	.94
	.76	.60	.88	.96	.98	
.95	.82	.67	.74	.72	.87	1.12
	1.02	.76	.01	.65	.97	
.92	.90	1.13	.99	.88	1.19	.88
	.92	.89	.86	.99	.77	
.99	4.2 / -.8 / 1.08	1.1 / .9 / .57	.77	.78 / 5.4 / .3	1.05 / 5.1 / 1.0	1.07
	1.07	1.10	.98	.95	.72	
.98	1.06	1.04	.87	.94	.99	.98
	1.00	1.13	.76	.82	1.06	
1.04	1.00	.86	.01	.90	.73	1.01
	1.05	.33	RAKE MOUNTING POINT	.89 / 7.4 / -2.0	.99 / 8.0 / -1.3	.99
1.05	5.6 / -2.5 / .97	5.0 / 4.7 / .03	.77	.93	1.05	1.01
	1.02	.80	.30	.58	1.01	
1.02	1.04	.94	.77	.01	1.10	
	.97	1.01	.30	.91	.99	
.98	1.01	.97	.54	.99	.98	.95

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS C_P, $\frac{P_T-P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT TO RIGHT LOOKING AFT.

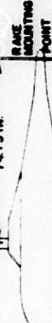NOTE- TABLE IS SEEN FROM THE FLOW. MODEL NOSE, LOOKING AFT.

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TABLE IX – Continued

Right table (Run 16, Point 10)

RUN 16 POINT 10 ALPHA= .0 DEG PSI=-4.0 DEG
V=100 KNOTS q= 31.7 PSF. CONFIGURATION FMB

.97	1.00	.98	.87	1.07	.98	.96
	.95	.99	1.06	.82	1.13	
1.00	1.02	.91	.05	1.09	.81	.99
	1.05	.99	.96	.84	1.10	
1.03	.85	.86	.95	1.03	.90	.93
	1.02	1.01	.96	.87	1.24	
1.06	.99	.98	.95	1.27	.80	1.21
	1.03	.78	.87	.81	1.12	
.90	.42 [-9.0 / -6.1]	.89	1.05	.98 [1.4 / -3.0]	.43	.95
	.65	.81	.84	.99	1.00	
1.04	.85	.7n	.52	.33	.99	1.03
	.55	.67	.78	.96	.90	
.96	.87	.6n	.04	.60	1.06	.97
	1.04	.88	RAKE MOUNTING POINT ⊕	.79	1.05	
1.03	.90 [-5.9 / 4.4]	1.04	1.05	.98 [-.3 / -3.1]	.92	1.00
	.89	.98	.84	.91	1.00	1.00
1.03	.97	.6n	1.09	1.24	.99	.96
	.89	.7n	.92	.97	.98	
.99	.82	.83	.25	1.02	.99	.96

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_T - P_S}{q}$

NUMBERS IN TABLE INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT. — 7.475 IN — ⊕ RAKE MOUNTING POINT

NOTE- TABLE IS SEEN FROM THE FLOW,
MODEL NOSE, LOOKING AFT.

Left table (Run 16, Point 11)

RUN 16 POINT 11 ALPHA= .0 DEG PSI=-4.0 DEG
V=100. KNOTS q= 31.7 PSF. CONFIGURATION FMB

.99	.99	.93	.96	.96	.96	1.05
	.99	1.05	.95	1.13	1.07	
.94	.92	.93	1.09	1.07	.95	.93
	1.05	1.01	.74	.82 [.9 / -5.5]	.96	
1.03	.97	1.13	1.06	.79	.98	.96
	.93	.84	.99	1.03	1.32	
1.09	.95	1.01	1.20	.75	.84	1.00
	.87	.52	.00	1.07	1.01	
.94	.87 [-8.3 / -5.2]	.45	.88	.77 [.1 / -3.7]	1.06 [-.1 / -3.2]	.96
	.71	.71	.96	.90	.94	
.97	.89	.43	.04	.95	.96	1.00
	.70	.49	.54	.89	.97	
.98	.64	.43	.31	.27	1.02	1.03
	.86	.63	RAKE MOUNTING POINT ⊕	.40	1.07	
1.00	1.02 [-3.9 / 1.0]	.71	1.06 [-2.0 / -5.6]	1.03 [.3 / -1.4]	1.00
	.91	.78	1.00	1.00		
1.01	.31	.40	.80	1.03	.98	
	.80	.65	1.07	1.01	1.00	
.98	.68 [-2.2 / -4.6]	.72	.33	.99	.98	.96

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT. — 7.475 IN — ⊕ RAKE MOUNTING POINT

NOTE- TABLE IS SEEN FROM THE FLOW,
MODEL NOSE, LOOKING AFT.

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TABLE IX – Continued

RUN 16 POINT 13 ALPHA= 4.0 DEG PSI=-4.0 DEG
V= 100. KNOTS q= 31.7 PSF. CONFIGURATION FHB

RUN 16 POINT 12 ALPHA= .0 DEG PSI=-4.0 DEG
V= 100. KNOTS q= 31.7 PSF. CONFIGURATION FHB

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW,
MODEL NOSE, LOOKING AFT.

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TABLE IX - Continued

RUN 16 POINT 14 ALPHA= 4.0 DEG PSI=-4.0 DEG
V= 100. KNOTS q= 31.7 PSF. CONFIGURATION FHB

RUN 16 POINT 15 ALPHA= 4.0 DEG PSI=-4.0 DEG
V= 100. KNOTS q= 31.7 PSF. CONFIGURATION FHB

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_P = \frac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_P = \frac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

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TABLE IX - Continued

RUN 16 POINT 17 ALPHA= .0 DEG PSI= 4.0 DEG
V= 100. KNOTS q= 31.7 PSF. CONFIGURATION FHB

.98	-2.6 / .4	.98	-6.3 / .1	.94	1.00	.96	.98
		.98		.97	1.00	.96	.91
1.01	1.02	.90	1.03	.86 / -3.8 (1.0)	1.00	1.02
	1.04	.88	.89	1.04	1.03 / 1.7	.76	
.68	.99	.97	.95	1.11	.93	.89
	1.09	1.07	.97	.84	.98	
.90	1.09	1.24	1.02	.96	.76	1.03
.96	.93 / -0.3 (.1)	.92	.86	.50	.93	.66
	.96	1.01	.7	.89 / -12.0 (.7)	.82 / -.8 (3.7)	
1.01	1.04	.91	.8	.59	.82	.95
.96	.91	.87	1.02	.54	.74	
	.96	.9	1.17	.33	.82	.92
1.02	1.03 / -2.3 (1.0)	.74 / -3.5 (5.2)	.50	.50	.50	
	.98	.94	RAKE MOUNTING POINT	.49	.59	.95
	1.01 / 3.0	.71		.08 / -3.5 (-2.0)	.89 / -.7 (5.2)	
1.01	.98	1.01	.46	1.29	1.04	.94
	.95	.97	.77	.30	1.02	
1.00	.98	1.02	1.23	.32	.70	.94

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

RUN 16 POINT 16 ALPHA=-4.0 DEG PSI= 4.0 DEG
V= 100 KNOTS q= 31.7 PSF. CONFIGURATION FHB

.98	-5.7 / 3.6	.98	.98	.94	-5.3 / 2.4	.96
	.99	.98	1.00	.94	1.00	
1.01	1.02	1.00	.95	.97	.98	
	.98	.97	1.01	.95	.97	
.95	1.00	.98	.98	.96	.90	
	1.03	1.05	.48	.99	1.03	
.99	.99	1.10	1.04	.91	1.03	
1.05	.96 / -7.4 (1.8)	.9	.49	1.01 / -12.5 (2.0)	.95	1.00
	.91	1.00	.96	.75	.42	
1.04	1.07	1.17	.97	.66	.97	.96
	.95	1.03	.75	.55	.74	
1.01	.99	1.08	.83	.72	.38	
	1.04	.9	.85	.29	.50	.95
1.05	.96 / -4.0 (-5.8)	.9	RAKE MOUNTING POINT	.51 / -8.1 (-.6)	.99 / -10.9 (18.6)	.96
	.89	1.10		.42	.67	
1.04	1.02	.49	.03	.68	.08	1.00
	1.05	.92	.31	.45	.95	
1.00	1.01	1.03	.50	.85		
1.00	1.00	.97		.51	.88	.95

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

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TABLE IX - Continued

RUN 16 POINT 18 ALPHA= .0 DEG PSI= 4.0 DEG
q= 31.7 PSF. CONFIGURATION FHB
V= 100. KNOTS

.98	.98	1.02	.97	.95	.91	.91
	.97	.93	.94	.97	.92	
.94	1.00	.95	1.00	.98	1.00	.94
	1.06	1.03	1.01	1.02	.92	
1.05	1.00	1.02	.90	.78	.77	.98
	.92	.80	.96	1.02	1.11	
.90	.97	1.00	1.05	1.03	.76	.90
	.89	.73	.83	.57	.85	
1.06	[-3.0 / 1.2] 1.02	.95	.93	.80	[-5.7 / 5.0] .79	[-3.1 / .3] .93
	.98	.98	.79	.64	.77	
.98	.94	.87	.47	.68	.36	.90
	.90	.95	.48	.53	.73	
1.01	.98	.94	RAKE MOUNTING ⊕ POINT .76	.72	.56	.95
1.03	1.02	.90	.90	.43	.91	.92
	[-1.3 / 1.3] .93	[-2.1 / 5.5] .97	.93	.79	[.9 / -1.4] .92	[-.2 / -1.3]
1.03	1.00	.99	.90	.64	1.17	.98
1.01	1.01	1.00	.87	.80	.71	.94
				.68	.92	
				.58	.86	

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
7475IN → RAKE MOUNTING POINT

NOTE- TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

RUN 16 POINT 19 ALPHA= .0 DEG PSI= 4.0 DEG
q= 31.7 PSF. CONFIGURATION FHB
V= 100. KNOTS

.99	.97	1.00	.96	.99	.98	.95
.98	.99	.96	.98	.93	.95	.95
.89	1.00	.97	1.00	.97	.95	1.00
	1.02	.97	.94	.90	.90	.96
.98	1.01	.92	.98	1.04	.87	
	1.02	1.01	.92	.93	.90	
.89	.96	.91	.68	.72	1.00	1.01
	1.04	.95	.98	.87	.86	.93
1.03	[-2.0 / 3.5] .94	[-2.0 / 5.4] .99	.99	.71	[.2 / .3] .90	.96
	1.02	.97	.39	.83		
1.01	1.00	.93	1.01	.59	1.01	.94
	1.01	.94	.07	.81	.87	
1.03	.98	.91	RAKE MOUNTING ⊕ POINT .41	.79	.96	
	1.07	1.00		.62	.96	
1.03	[-.8 / 1.6] 1.01	.98	.68	.90	.95	1.00
	.96	.94		.01	.94	
1.03	.97	1.02	.68	.68	.94	
	.98	.93	.09	.93	.90	
1.01	.97	1.00	.95	.11	.33	.93

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
7475IN → RAKE MOUNTING POINT

NOTE- TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

TABLE IX - Continued

RUN 16 POINT 20 ALPHA= 4.0 DEG PSI= 4.0 DEG
V= 100 KNOTS q= 31.7 PSF. CONFIGURATION FH8

1.00	1.02		2.2 / 1.3		
	1.00	1.07	1.00	.98	1.02	.99	1.07
.97	.95	.9	.3 / 1.7	.86	.94	.97
.94	1.01	1.05	1.25	1.09	1.00
	.93	.94	.32	.72	1.09
.98	.99	.94	.47	.85	.94
	.99	.94	1.04	.62	1.01
.97	1.01	1.12	.76	.93
	1.00	.98	.4 / .3	1.11	.5 / 3.2	.67	1.6 / 1.2
	.96	1.11	.46	.95
.98	.99	.47	.74	.99
	1.04	.97	.76	.81
.99	.85	1.1	.46	.33
	1.07	1.05	.95	1.04
1.04	1.00	1.2 / -5.3	.9 / 1.1	.77	.5 / 1.5	1.06	4.9 / 3.6
	.98	.95	.44	.93
1.01	.92	1.01	.93	.47	.64
	1.01	.98	.85	.70	.74
.99	1.01	1.01	1.13	.64	.95

RAKE MOUNTING POINT

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

7475 IN.

RUN 16 POINT 21 ALPHA= 4.0 DEG PSI= 4.0 DEG
V= 100 KNOTS q= 31.7 PSF. CONFIGURATION FH8

.97	.97	2.1 / 1.9	.94	.98	1.00	.93
	.96	1.04	.48	.99	1.03	.82
.87	.80	.93	.09	.74	.88
.92	.99	.90	1.09	.95	1.00	.94
	.94	.93	.41	.70	.91
.94	.77	.97	.91	.91	.80	1.04
	.95	1.04	.79	.86	.55
1.02	.97	.98	.29	.76	.92
	1.01	1.9 / 2.1	1.00	.96	.83	-3.2 / .8	1.17	-.1 / 3.7	1.05
	.96	.97	.98	.68	.82	.95
.97	1.07	.60	.81	.79
	.98	.86	.46	.97	.75
.97	1.02	.80	.80	1.22	.78
1.05	1.08	1.09	.53	.95
	.97	.8 / 6.0	1.07	.9 /	.79	3.5 / .6	1.11	-.2 / -.5	.97
	1.02	.98	.78	.87
1.04	.98	1.05	1.03	.95	.82	1.01
	1.01	.98	.42	.44
.99	1.01	.99	.53	.66	.92	.98

RAKE MOUNTING POINT

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

7475 IN.

TABLE IX – Continued

RUN 91 POINT 5 ALPHA= .0 DEG PSI= -.0 DEG
V= 125 KNOTS q= 48.3 PSF. CONFIGURATION FHB

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_P = \dfrac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW.
MODEL NOSE, LOOKING AFT.

RUN 1b POINT 22 ALPHA= 4.0 DEG PSI= 4.0 DEG
V= 100 KNOTS q= 31.7 PSF. CONFIGURATION FHB

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_P = \dfrac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW.
MODEL NOSE, LOOKING AFT.

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TABLE IX — Continued

RUN 41 POINT 7, ALPHA= .0 DEG, PSI= -.0 DEG, V=125 KNOTS, q= 48.3 PSF. CONFIGURATION FHB

.94	.96	1.03	1.02	.95		.99
	.85	.97	1.02	.96		
.99	.94	.98	.97	.94		.97
	.92	1.05	.75	.94		
.96	.90	.94	1.03	.88	1.00	.97
	.86	.92	.84	.80		
1.00	.89	.94	.81	.73		.98
	.68	1.05	1.09	.71		1.04
1.00	.88	.47	.75	.82		
	.23	.96	.75	.67		
.96	1.00	.60	.73	1.06		1.01
	1.00	.78	.70	.69		1.00
.90	.90	.67	.69	.50		
	.56	.76	RAKE MOUNTING POINT	.81 1.04		1.00
.94	.84	.94		.83		
		.92				
.96	1.02	.91	.41	1.01		1.04
	.92	1.05	.38	.76		
.96	.94	.99	.65	.90		.98

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT.

NOTE— TABLE IS SEEN FROM THE FLOW.
MODEL NOSE, LOOKING AFT.

RUN 41 POINT 6, ALPHA= .0 DEG, PSI= -.0 DEG, V=125 KNOTS, q= 48.3 PSF. CONFIGURATION FHB

1.01	1.00	1.01	1.01	.99		.98
	.89	1.00	1.03	.98		.98
1.01	.97	1.01	.95	.99		.99
	.97	1.15	.95	.95		.96
.99	.87	.99	1.00	.94		.98
	.87	.95	.87	.94		.98
1.02	.74	.83	.83	.93		.85
	.88	.90	1.09	.57		.85
1.01	.82	.64	.69	.78		.96
	.77	.85	.29	.94		.99
.99	.85	.84	.79	.88		.85
	1.05	.41	.94	1.24		.90
.94	.77	.57	.76	.81		.74
	.82	1.02	RAKE MOUNTING POINT	.66		.89
.98	.91	.85		1.06		.95
	1.00	.91		1.00		.94
.98	.92	.82	.31	.60		.96
	.93	.78	.65	.96		.95
1.00	1.00	.82	.21	1.06		.96

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY
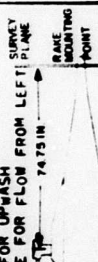PLANE TO RIGHT LOOKING AFT.

NOTE— TABLE IS SEEN FROM THE FLOW.
MODEL NOSE, LOOKING AFT.

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TABLE IX - Continued

RUN #1 POINT 9 ALPHA= 4.0 DEG PSI= -.0 DEG
V=125 KNOTS q= 48.3 PSF. CONFIGURATION FHB

RUN #1 POINT 8 ALPHA= 4.0 DEG PSI= -.0 DEG
V=125 KNOTS q= 48.3 PSF. CONFIGURATION FHB

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURF.
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

RAKE
MOUNTING
POINT

TABLE IX - Continued

RUN 41 POINT 10 ALPHA= 4.0 DEG PSI=-4.0 DEG
V= 125 KNOTS q = 48.3 PSF. CONFIGURATION FHB

RUN 41 POINT 11 ALPHA= .0 DEG PSI=-2.0 DEG
V= 125 KNOTS q= 48.3 PSF. CONFIGURATION FHB

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT.
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW.
MODEL NOSE, LOOKING AFT.

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TABLE IX – Continued

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS C_p, $\dfrac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT.

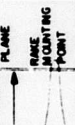NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

RAKE MOUNTING POINT

TABLE IX – Continued

RUN #1 POINT 15 ALPHA= 4.0 DEG PSI=-2.0 DEG
V= 125 KNOTS q= 48.3 PSF. CONFIGURATION FHB

.98	.99	.99	1.00	.95	.98
	.94	.95	.96		.93
1.00	.94	.94	.92	6.0 / -3.2	.93
.97	.93	.93	.98		
	.97	.84	.91	.70	.81
.98	.97	.90	.62		.80
	.97	.84	.89	6.9 / -.6	1.00 / .73
.98	1.00 / .73	.80	.85	.48	
	.82	.60	.84	.68	
.99	.98	.51	.52	.76	
	.38	.57	.79	.61	
1.04	1.08	.87	1.01	.73	
	.93	.29	.92	.33	4.1 / -4.8
1.02	.98	.60	.47	RAKE MOUNTING POINT	3.8 / -.5
	.99	.89	.80	.64	1.04
1.00	.98	.93	.32	.42	1.00
	1.01	.99	.75	.52	1.01
.99	.96	.61			
	1.00	.68			

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT.

7473 IN

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

RAKE MOUNTING POINT

RUN #1 POINT 14 ALPHA= .0 DEG PSI=-2.0 DEG
V= 125 KNOTS q= 48.3 PSF. CONFIGURATION FHB

1.00	1.00	1.00	1.02	.96	.97
.98	.99	.98		.91	
.98	1.01	.94	1.01	1.0 / -3.3	1.00
.99	.99	.99		.98	
.99	.93	.89	1.08	1.00	
1.05	.87	.67	.98	.87	
.80	.76	.51	.37	.99	
.81	.56	.70	.65	.8 / -3.9	.94 / -1.2
.69 / .93	.46	.85	.96	.94	
.97	1.10	.56	.32	1.01	
1.06	.90	.94	.61	.97	
1.13	.97	.90	.71	1.00	
1.01	.98	.82	1.01	-.8 / .3	.7 / -.1
1.05	.97	.69	1.00	1.00	
.98	.50	.54	.91		
1.01	.85	.54	.94	.99	1.01
1.00	.47	1.09	.98		1.00
.97	.76	.33	.98		1.00

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT.

7473 IN

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

RAKE MOUNTING POINT

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TABLE IX – Continued

RUN 91 POINT 16 ALPHA= 4.0 DEG PSI=-2.0 DEG CONFIGURATION FHB
V= 125 KNOTS q = 48.3 PSF.

RUN 91 POINT 17 ALPHA= 4.0 DEG PSI=-2.0 DEG CONFIGURATION FHB
V= 125 KNOTS q = 48.3 PSF.

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

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TABLE IX – Continued

.99	.98	1.00	.99	1.00	.93	.98	.96
.98	.98	.99	.97	.97	.97	.92	.99
1.00	.98	.97	1.03	1.00	.96	.91
.99	.99	1.00	.94	.98	.99	.94
.99	.98	.97	.80	.97	1.05
.95	.99	.86	.95	.96
.93	.81	.78	.58	.96
1.02	1.04	[-.4 / 1.6]	.71	.83	.73	[-3.2 / 3.3]	.57	[2.8 / 1.2]	.92
1.00	.93	.58	.56	1.03
1.08	.66	.83	.45	.66	.92
.98	.91	.94	.48	.51	.94
.93	.57	.68	.33
1.00	1.09	.68	.73	.28	.93
1.01	.91	[-1.3 / .4]	.47	RAKE MOUNTING POINT	.88	[-2.7 / .4]	.96	[.0 / 3.2]	.94
.98	.45	.80	.95
1.01	.76	.66	.88
1.00	.92	.58	1.05	1.04	.97
1.02	1.01	.65	.81	.95
1.00	1.03	.99	.70	.72	1.04	.99

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW.
MODEL NOSE, LOOKING AFT.

.98	.99	1.00	.98	.95	1.00	.94	1.05
.99	.99	.95	.96	.96	1.00
.99	.99	.96	1.03	.94	.98
.92	.97	.95	1.02	1.02	.97
.98	.99	1.01	.92	.93	.93	.98
.91	.88	.86	.85	.67
.76	.61	.99	.92
1.06	.98	[-1.7 / 1.0]	.80	.75	.76	[-4.5 / .7]	1.02	[-.6 / 2.3]	.99
1.04	.93	.60	.93	.80
1.05	.84	.46	.69	1.05
1.02	.93	.91	.75	.77	.89
.69	.97	.49	.87	1.01
.97	1.00	.99	.71	1.13	.91
1.04	.95	[-1.5 / .3]	.41	RAKE MOUNTING POINT	.38	[-4.4 / .7]	1.03	[.5 / 3.2]	1.00
.97	1.11	1.10	.98
.97	.96	.91	1.04
1.01	.96	.91	.64	.64	1.12	1.01
1.02	1.02	.94	.32	.42	1.06
1.02	.95	1.01	.25	.88	1.07	1.00

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW.
MODEL NOSE, LOOKING AFT.

TABLE IX – Concluded

RUN 41 POINT 21 ALPHA= 4.0 DEG PSI= 2.0 DEG CONFIGURATION FHB
V= 125. KNOTS q= 48.3 PSF.

RUN 41 POINT 20 ALPHA= 4.0 DEG PSI= 2.0 DEG CONFIGURATION FHB
V= 125. KNOTS q= 48.3 PSF.

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_P = \dfrac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE– TABLE IS SEEN FROM THE FLOW
MODEL NOSE. LOOKING AFT.

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TABLE X. WAKE PRESSURE COEFFICIENTS AND FLOW DIRECTIONS AT THREE
FORWARD SPEEDS AND VARIOUS FUSELAGE ATTITUDES AND ROTOR
OPERATING CONDITIONS, CONFIGURATION FHBf

RUN 28 POINT 6 ALPHA= .0 DEG PSI= -.0 DEG   q= 11.4 PSF. CONFIGURATION FHBf   V=60 KNOTS

.87	[-5.7 / 4.0]	.78	1.07	.88	.95	.88	.96
.92		.77	1.02	1.44	.94	.81	
.92		.83	1.09	.98	1.11	.89	.88
1.00		.96	1.09	1.11	1.17	1.25	
1.00		1.11	1.02	1.25	1.02	1.11	1.18
		1.03	1.26	1.14	1.13	.94	
.92		.93	1.21	.85	1.14	1.10	1.09
.82	[-5.0 / -.9]	.87 / .95 / .83	.89 / .91	.69	1.07 / 1.03	.89 / 1.16	[-1.8 / -1.1] 1.06
				.86	.80	1.04	
.92		.87	1.02	.87	.82	.92	1.01
		.95	.86	.48	.36	.80	
.90		.66	.73	1.12	.86	.82	1.10
.99	[-2.8 / -3.8]	.81 / .52 / .79	.70 / .48 / .77	.81	.66 / .32 / 1.15	.95 / .91 / .97	[.3 / .4] 1.11
.95		.92	.29	RAKE MOUNTING POINT	.97	1.04	1.02
		.87	.87	.49	.62	1.09	
.87		.95	.82	.48		1.11	1.01
			1.00	.49	1.04		

RUN 28 POINT 7 ALPHA=-8.0 DEG PSI= -.0 DEG   q= 11.4 PSF. CONFIGURATION FHBf   V=60 KNOTS

.97	1.06	[-15.9 / -.5]	1.00	.93	1.45	[-11.1 / -2.3] .98	.78	.89
1.03	.95		.99	.96	.98	.87	.87	.94
1.00	1.00		.97	.95	.97	.95	.95	.97
1.00	.95		1.00	.99	.98	.91	.91	
1.04	.90		1.04	.98	.90	.95	.95	.91
	.93		1.07	1.09	.90	.85	.85	
1.13	.97		1.06	1.01	.87	.89	.89	
1.07	1.10 / 1.21 / 1.06	[-14.0 / -3.7] 1.10 / 1.30	1.13 / 1.11 / 1.02	.93 [-11.3/-3.0] 1.05/.93	.98 / 1.03 / 1.03	[-13.6/-6.3] .91 / .75
1.06	1.30		1.02	1.06	.88	.98	1.40
	1.10	1.50	1.17	1.16	1.09	1.40	
1.09	1.05	[-12.4 / 1.1] 1.17	1.15	1.35	1.02	.97	1.05
1.13	.93 / 1.03 / .87	[-15.7 / 5.2] .92 / .82 / 1.06	RAKE MOUNTING POINT	.75 [-18.1/-9.9] .61/.72	1.14 / 1.01 / .37	[-7.2 / -.6] .86
.98	.95		.97	.35	.38	1.12	.88
	1.06		.70	.72	.65	.61	
.96	.61		1.05	.64	.79	.55	.84

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{p_t - p_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT (POINT 7) / RIGHT (POINT 6) LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

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TABLE X - Continued

RUN 28 POINT 9 ALPHA=8.0 DEG PSI= -.0 DEG
V= 60 KNOTS q = 11.4 PSF. CONFIGURATION FHB1

1.04	1.01	.92	.85	1.01	.88	.87
.98	1.00	.93	.98	.98	.94	.93
1.02	1.01	1.08	.89	1.02	1.05	1.02
	1.01	.94	.95	.98	1.04	
1.02	.95	.96	.85	.95	.99	
	1.02	.96	.95	.89	.86	1.02
.97	1.07	1.04	1.07	.79	.75	.94
-13.4 .0	1.20 -13.1	1.09	1.09	.73 -12.6 .3	.81 -14.0 -3.0	.81
1.11	1.32 -5.3	1.21	1.11	1.09	1.09	
1.16	1.11	1.06	1.14	1.25	1.32	1.38
	1.34	1.04	1.00	1.30	1.17	
	1.82	1.33	1.05	.78	1.13	
.98	1.19	1.08	.99	1.17	1.09	1.08
-11.6 1.7	1.04 -15.0 5.9	.95	RAKE MOUNTING POINT	.94 -19.7 -3.9	.93 -14.5 -1.1	.90
1.12	.88	.95		.56	.75	
1.14	.89	1.01	.37	.61	.37	
	1.03	.82	.74	.55	.41	.63
.98	.98	.73	.46	.34	.73	
1.05	1.04	.95	.37	.55	.77	.96

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS c_p, $\frac{p - p_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE.
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE MODEL NOSE, LOOKING AFT.

RAKE MOUNTING POINT

RUN 28 POINT 8 ALPHA=8.0 DEG PSI= -.0 DEG
V= 60 KNOTS q = 11.4 PSF. CONFIGURATION FHB1

.98	1.01	.93	.95	.90	1.11	1.08
	.99	.90	1.00	.90	1.01	1.03
1.01	1.01	.92	1.02	.97	1.05	1.05
	.96	.82	.96	.96	1.00	
.99	.98	.76	.85	.92	.97	1.05
	.89	.84	.89	.75	.92	
.78	.75	.97	.60	.40	.85	1.08
-14.9 -4.4	1.21 -14.8 -5.0	1.07	1.21	1.42 -11.6 -1.5	1.91 -12.8 -.9	1.15
1.31	1.26	1.17	1.26	1.44	1.68	
1.06	1.06	.96	1.06	1.01	1.18	1.01
	1.14	.78	.75	.96	1.09	
	.87	.89	.62	.87	1.10	
1.02	.94	1.68	.68	.61	1.04	1.47
-12.5 2.0	.85 -16.4 4.9	.68	RAKE MOUNTING POINT	.82 -17.1 -8.9	.79 -8.3 3.1	1.18
1.24	.87	.64		.79	1.06	
1.12	.83	.44		.75	.84	1.12
	.84	.78	.59	.91	.75	
	.61	.67	.22	.97	1.05	
1.05	1.00	.62	.40	.61	1.09	1.04

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS c_p, $\frac{P - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE.
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE MODEL NOSE, LOOKING AFT.

RAKE MOUNTING POINT

TABLE X - Continued

RUN 28 POINT 11 ALPHA=4.0 DEG PSI= -.0 DEG
V= 60 KNOTS q= 11.4 PSF. CONFIGURATION FHBf

.93		-3.9 / -.9	1.03	.94	1.00	1.21	2.5 / -2.3	.89	1.08
.91			.95	1.00	.90	1.41		.89	.89
.58			.91	.90	.86	.95		.96	.95
.91			.78	.84	.82	.82		.83	
			.62	.93	.89	.79		1.00	.95
			.78	1.09	1.04	1.55		1.22	
			.94	.73	1.04	1.05		1.22	.97
.89	-5.3 / -1.7	.69 / 1.16	.69	.92	.65	.29	-1.4 / -1.6	.98 / .94	1.3 / -.0
			.88	.92	.63	.83		.74	.93
.90		.80		.92	.70	.82		.26	.87
		.95	.67		.88	.65		.97	
.90	-1.0 / -2.3	1.01 / 1.04	.58	RAKE MOUNTING POINT	.89	.55 / .73	.4 / .1	1.09 / .92	2.3 / 3.5
1.08		.98	.90	.42		.30		.92	.89
		1.05	.54		.85		.83		
1.03		1.08	1.11	.49	.56		.91	.85	.89
		.99	.72	.52		.71		.93	
1.04		.91	.76	.98	.59		.91	.88	.93

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

7.475 IN   RAKE MOUNTING POINT

RUN 28 POINT 10 ALPHA=4.0 DEG PSI= -.0 DEG
V= 60 KNOTS q= 11.4 PSF. CONFIGURATION FHBf

1.11	-10.7 / -6.0	1.26 / 1.10	.97	.93	.88	.82	-8.0 / -1.4	.82	.93
			1.02	.96	1.03	.90		.89	
.98			.98	.93	.93	1.04		.96	.99
			.96	.97	.91	1.07		.88	
.93			.90	1.11	.78	1.09		.84	1.13
			.77	1.07	.95	1.09		1.02	
1.08			1.15	1.03	1.07	.81		1.15	1.02
1.00	-9.6 / -3.7	1.10 / .99	1.26 / 1.07	1.23 / 1.00	1.27 / 1.01	.87 / 1.23	-12.3 / -6.4	.96 / .76	-6.4 / -1.7
			1.10		.73	.88		.86	1.08
1.00			.90	.73	.83	.81		.76	.93
			.92	.65	.91	.94		.96	
.92	-9.8 / -2.2	1.01 / .78	.96	.74	.64	.86	-3.0 / 2.4	.86	-3.7 / 4.5
1.12			1.01	.60	RAKE MOUNTING POINT	.44		1.08	.82
			.78	1.11		.86		.33	
1.04			.46	.56	.36	.49		.55	.87
			.42	.31		.62		1.07	
1.04			.87	.77	.44	.72		.82	.99
			.91	.95	1.02	.75		.89	

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

7.475 IN   RAKE MOUNTING POINT

TABLE X - Continued

RUN 28 POINT 12 ALPHA= 8.0 DEG PSI= -.0 DEG CONFIGURATION FHBf
V=60. KNOTS   q= 11.4 PSF.

.53	[1.7 / -.0]	.79	.85	.76	.78	.55	.59
.73	.79	.82	.79	.64	.75	.36	.47
.72	.83	.81	.82	.75	[7.6 / -3.8]	1.21	1.00
.85	.93	.86	.75	.82	1.16	1.00	.91
.95	.71	.92	.73	1.22	1.06	[4.6 / 1.7]	.94
.95	.67	.67	.87	1.06	1.10	1.08	1.01
.95	.90	.68	1.04	.47	.59	.80	.98
1.06	.92	[-2.3 / -.7]	1.23	.83	.75	.86	[6.1 / 2.4]
.97	.87	.98	.81	RAKE MOUNTING POINT	.62	.97	.98
.93	.89	.81	.45	.48	.76	1.06	.98
	1.06	.67	.76	.96	.80	.94	.94
	.97	.48	.96	.62	1.05	.83	.84
	.98	.59	.62	[5.2 / 3.2] 1.00	.79	.35	
	1.04	.65	1.00	.60	.87	.42	

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS C_p, $\dfrac{P-P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE TO RIGHT LOOKING AFT.

7.475 IN   RAKE MOUNTING POINT

NOTE- TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

RUN 28 POINT 13 ALPHA= .0 DEG PSI=-8.0 DEG CONFIGURATION FHBf
V=60. KNOTS   q= 11.4 PSF.

1.04	1.00	1.04	.98	1.07	1.08	1.06
.96	.97	1.02	1.08	1.00	1.14	1.05
1.17	.91	1.04	1.08	1.13	1.10	1.05
1.17	.91	.97	.89	1.06	1.05	1.13
.99	1.52	1.13	1.16	1.14	1.06	.96
.92	1.45	1.16	1.11	1.07	1.16	1.07
1.08	.97	1.02	1.08	.95	1.10	1.14
.97	[-5.2 / -5.7] 1.01/.83	[-3.9 / -6.8] 1.05/.97	.99	1.18	[-2.8 / -7.0] 1.16/1.21	[-2.0 / -5.6] .7
1.03	.93	.92	.98	1.13	1.10	1.11
.94	1.00	.48	.78	1.03	1.08	1.04
	1.12	.92	.82	.88	.99	1.02
	[-6.4 / -4.2] .19/.67	[-19.2 / 159.9] .22/.58	RAKE MOUNTING POINT	.96	[-.3 / -6.7] .88/.98	[.7 / -5.9] .98
	.58	.36	1.07	1.00	.91	
	1.15	.57	.94	.97	.88	
	1.07	.29	.98	1.02	.98	
		.70		1.06	1.06	

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS C_p, $\dfrac{P-P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE TO RIGHT LOOKING AFT.

7.475 IN   RAKE MOUNTING POINT

NOTE- TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

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TABLE X - Continued

RUN 28 POINT 14 ALPHA2=-8.0 DEG PSI=-4.0 DEG, CONFIGURATION FHB1
V=60 KNOTS q = 11.4 PSF.

.99	.92			1.00	.94	.89	.87	.81
	1.01	-11.3 / -3.8	.78	.94	.97	.80	
1.01	1.06	-10.5 / -6.2	.27	.94	.79	-10.1 / -6.5	.92	.93
	1.02	1.17	1.30	.91	.82	.89	
.96	.98	1.39	1.26	1.13	.89	1.01	.98
	.91	1.27	1.22	.91	1.04	1.05	
1.20	.75	.94	.97	.82	1.06	1.14	1.13
	.90	-14.6 / -2.4	1.13	.46	1.26	1.16	-8.5 / 3.6	1.21
.90	1.13	-18.4 /	.53	1.21	1.28	.91	
	1.17		.63	1.26	.95	1.33	
1.58	1.39			1.28	1.20	1.39	1.28
	1.27			1.08	1.07	1.11	
1.19	.94			.94	1.05	1.02	1.08
	.82	-14.6 / -2.4	1.13	RAKE MOUNTING POINT	.64	-13.9 / -3.8	.98	-6.1 / -1.3
1.11	.99		.53		.82	1.00	1.04
	.95		.63	1.14	.94	
1.04	.95			.42	.88	.98	.90
	.62			.61	1.06	.92	
.96	.85			.39	.98	.94	.91

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $c_p = \frac{p_T - p_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE.
← 74.75 IN → RAKE MOUNTING POINT

NOTE- TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

RUN 28 POINT 15 ALPHA2=-8.0 DEG PSI=-4.0 DEG. CONFIGURATION FHB1
V= 60. KNOTS q= 11.4 PSF.

.96	1.06	-13.6 / -8.4	1.07	1.01	1.07	1.08	-7.7 / -5.8	.80	.88
	1.02		1.01	1.08	1.01	1.08	.87	
1.01	.96		.98	1.05	.84	.97	.97	
	.95		1.10	1.00	.99	1.00	1.00	
1.09	.88		.98	.96	1.06	1.07	1.01	
	.79		.77	1.01	1.18	.97	
.84	1.01		.68	.83	1.22	.89	1.08
1.47	1.15	-13.6 / -8.4	1.25	2.22	1.12	-11.7 / -5.4	1.35	1.19
	1.18	-12.6 / -8.2	1.35	1.31	1.26	1.25	
1.08	1.06		.96	1.06	1.08	.89	1.11
	.95		.91	.98	.85	.84	
	.87		.82	1.38	.82	.88	
1.02	.72		1.18	1.04	1.01	1.02	.99
1.15	.85	-15.4 / -4.3	.54	RAKE MOUNTING POINT	1.18	-8.6 / -2.2	1.04	-7.7 / .5	.89
	.68	-17.6 / 4.3	.95		.90	1.00	
	.64		.86	.96	1.04	
1.06	.47		.62	.58	.88	1.00	.89
	.66		.92	.36	.85	.82	
.97	.81		.61	.52	.82	.82	.85

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $c_p = \frac{p_T - p_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE.
← 74.75 IN → RAKE MOUNTING POINT

NOTE- TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

TABLE X – Continued

RUN 28 POINT 16 ALPHA=-4.0 DEG PSI=-4.0 DEG CONFIGURATION FHB1
V=60. KNOTS q= 11.4 PSF.

.92	-9.6 / -8.1	.93	-7.7 / -6.7	1.03	.94	.97	1.04	.95
		.91		.91	1.00	.98	1.08	
.94		.98		1.01	1.04	.94 / -3.9 / -5.8	.93	1.00
		1.04		1.02	1.04	.93	.96	
1.02		1.15		1.07	.96	.96	1.06	1.02
		.93		.97	.90	1.11	1.19	
.99		1.09		1.09	1.15	1.18	1.13	1.10
1.15	-6.5 / -4.3	1.40	-7.3 / -4.0	1.30	1.35	1.18 / -7.3 / -4.0	1.22	1.07
		1.01		1.42	1.17	.98	1.21	
1.02		1.02		1.02	1.05	1.10	1.18	
.97		.96		1.01	.96	1.09	1.10	1.13
		.81		.89	.29	1.02	1.12	
1.06		.94		.97	.54	1.02	1.04	1.04
1.06	-6.8 / -1.7	.77 / -9.1 / -1.5	.11	1.11 / -3.2 / -2.5	RAKE MOUNTING POINT	.98	.94	1.13
		.83		.56	.58	.89	.93	
1.02		.78		.52		.91	1.05	1.02
		.75		.41		.82	1.11	
.96		.87		.65	.76	1.12	1.10	
		.62		.64	.83	1.09	1.09	.99

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_P = \dfrac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

RUN 28 POINT 17 ALPHA= 4.0 DEG PSI=-4.0 DEG CONFIGURATION FHB1
V=60. KNOTS q= 11.4 PSF.

.99	-5.4 / -1.3	.87	1.00	.99	.84	.4 / -6.6	.93	.94
		.91	1.28	.73	.77		.74	
.91		1.15	.60	.56	.71		.84	.79
		1.15	.81	.99	.96		.94	
1.00		.51	1.07	1.03	.66		.79	.85
		.76	.89	1.20	.87		.83	
.74		.99	.97	.75	.70		.81	.95
.90	-6.3 / -7.2	.96	.99	1.01	.77 / 2.4 / -4.8	.94	1.01
		.78	.96	.41	.96	1.03	-.3 / -1.6
		.90	.93	.17	.98	1.03	
.96		.92	.62	.18	1.18	.94	1.08
		.96	.45	.39	.69	.96	
.92		.70	.44	.61	.94	.87	1.10
1.04	-.2 / -2.5	.63 / -1.9 / -1.2	.55	RAKE MOUNTING POINT	.93 / 1.0 / -4.0	.95 / 2.1 / -2.0	1.08
		.79	.62		1.13	1.03	
		.77	.72		.97	.98	
1.01		.73	.42	.95	.98	1.09	1.07
		.77	.46	.92	1.08	1.03	
.93		.78	.54	.27	1.11	1.07	.98

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_P = \dfrac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

TABLE X – Continued

RUN 28 POINT 20 ALPHA=4.0 DEG PSI= 4.0 DEG CONFIGURATION FHBf
V= 60 KNOTS q= 11.4 PSF.

1.01	.99	1.01	.97	.93	.94	1.10
	.98	.99	1.01	.98	1.01	
1.03	.95	.92	1.06	1.03	1.09	1.04
	1.01	.96	.98	1.10	1.16	
1.01	1.07	.92	1.11	1.09	1.17	.87
	1.05	.66	1.02	.93	1.17	
1.03	1.16	1.06	1.01	1.08	1.01	1.32
1.11	[-9.8 / -1.2] 1.16	[-10.6 / -4.0] 1.19	.97	1.50	[-11.9 / .7] .94	[-11.2 / -.1] .94
	1.28	1.06	1.22	1.00	1.06	
.96	.95	.95	1.06	.69	1.20	.90
	.91	1.06	.95	.94	.97	
.99	1.05	.94	.93	.87	1.03	
	1.22	.93	.66	1.12	.81	.87
1.05	[-4.9 / -1.8] .82	[-5.6 / 6.2] 1.14	RAKE MOUNTING POINT .66	.69	[-22.5 / -5.6] .94	[-5.9 / 3.7] .98
	.87	.84	.74	.72	.40	
1.08	1.00	.98	.59	.65	.63	1.03
	1.04	1.00		.66	.57	
1.02	1.02	.90	.56	.61	.69	1.09
					1.06	

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_t - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE– TABLE IS SEEN FROM THE FLOW,
MODEL NOSE, LOOKING AFT.

RUN 28 POINT 19 ALPHA=4.0 DEG PSI= 4.0 DEG CONFIGURATION FHBf
V=60 KNOTS q= 11.4 PSF.

1.04	.98	.86	.95	.82	.83	1.09
	.98	.88	.99	.86	.98	
1.20	.95	.92	1.07	.91	[-2.6 / 2.9] .90	.99
	.89	1.01	1.21	1.08	1.21	
.83	.70	1.14	.96	1.10	1.13	1.10
	1.15	.67	.86	.83	.66	
1.06	1.01	.94	1.05	.64	.75	.84
1.00	[-2.2 / .6] 1.03	[-3.5 / 1.8] .78	.95	.60	[-6.2 / 2.4] .58	[.3 / 1.5] .82
	.97	.92		.44	.74	
1.01	.92	.91	.91	1.04	1.34	.88
	.89	.89	1.05	.45	1.29	
1.02	.93	.81	.99	.58	.83	.89
	.95	.79	.69	.82	.93	
1.12	.91	[-.2 / 5.9] .91	RAKE MOUNTING POINT .32	.92	[-1.2 / .7] .98	[.8 / 3.6] .99
	.96	.97		.47	.76	
1.07	.95	.92	.60	1.11	.86	.77
	.93	.89	.33	.62	.87	
1.05	.98	.92		.88	.57	1.08
	.94			.21		

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_t - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

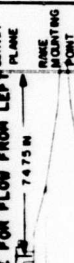NOTE– TABLE IS SEEN FROM THE FLOW,
MODEL NOSE, LOOKING AFT.

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TABLE X – Continued

RUN 28 POINT 22   ALPHA=-8.0 DEG   PSI= 4.0 DEG
V= 60. KNOTS   q= 11.4 PSF.   CONFIGURATION FHBf

Numbers in table are pressure coefficients $C_p = \dfrac{P_t - P_s}{q}$. Numbers in boxes indicate flow direction; box entries shown as (vertical / horizontal).

1.00	1.02	.89	.99	.99	.80	.88
1.09	1.05	1.02	1.00	.82 (−12.1/1.8)	.84	.98
1.12	1.06	1.11	.91	1.03	.96	1.05
1.05	1.02	1.02	.86	1.07	1.06	1.06
.81 (−8.3/2.7)	.99	1.01	.91	1.08	1.08	1.06
2.06	1.08 (−12.5/−1.3)	1.28	1.26	1.47	1.44	1.27
1.07	1.24	1.16	1.30	.88	1.27	.98
1.15 (−12.9/2.4)	1.16	1.15	1.17	.98 (−13.4/1.2)	1.11	.51 (−10.4/1.8)
1.06	1.19	1.05	.99 RAKE MOUNTING POINT	1.15 (−14.1/5.3)	.58 (−14.8/.5)	.85
1.05	1.02 (−11.8/20.3)	1.08	.91	1.00 (5.3)	.62	.88
	1.11	.93		1.33	.20	
	.92	1.12	.82	.56		
	.87	.99	.47	.25	.96	
	.96	1.10	.22	.57	.42	

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_t - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT TO RIGHT LOOKING AFT.

SURVEY PLANE   7475 IN   RAKE MOUNTING POINT

NOTE— TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

RUN 28 POINT 21   ALPHA=-8.0 DEG   PSI= 4.0 DEG
V= 60 KNOTS   q= 11.4 PSF.   CONFIGURATION FHBf

.97	1.01	.93	.91	.98	.80	.82
1.04	.99	.91	.89	1.00	.84	.87
1.05	1.00	.95	.93	.89	.89	.87
1.06	.99	.98	.92	.96	1.01	.62
1.25 (−16.4/−.5)	1.02	1.25	.97	1.29	.91 (−15.1/3.2)	1.13
1.20	1.04	1.41	1.12	1.34	.94 (3.2)	.98
.99	1.14	.98	1.23	1.09	1.01	—
1.18 (−11.1/3.0)	.98 (−9.9/−2.2)	1.03	1.19	.83	.90	.87
1.06	1.15	.89	.86	.61	.82	(−11.8/−5.4)
.91	1.28	1.00	.86 RAKE MOUNTING POINT	.54	.69	.79
	1.12	1.10	.91 (−7.6/−1.3)	.80 (−20.1/5.8)	.83 (−11.8/−5.4)	.66
	.92	1.05	1.00	.39 (5.8)	.45 (−5.4)	
	.85	1.17	1.24	.96	.53	
	1.07	1.26	.76	1.13		
	.98	1.23	.69	.61	.96	
	1.28	.94	.84	.44		

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_t - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT TO RIGHT LOOKING AFT.

SURVEY PLANE   7475 IN   RAKE MOUNTING POINT

NOTE— TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

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TABLE X - Continued

RUN 28 POINT 23 ALPHA= .0 DEG PSI= 8.0 DEG
V=60 KNOTS q= 11.4 PSF. CONFIGURATION FHB†

.91	.90	.96	1.02	1.07	1.08		1.11
	.90	1.08	.90	1.06	1.01		
.91	.76	1.08	.76	.78	.89		1.09
	.43	1.18	.50	.80	.78		
1.06	1.36	1.08	1.29	1.16	1.40		1.00
	1.05	1.14	1.15	1.03	1.18		
.78	.95	1.09	1.87	.95	1.03		.96
	1.03	.91 / −4.7 5.2	.83	.91	1.15 / −7.5 −.5		.61
.92	.84	1.07	1.00	.96	.87		
	.88	1.13	1.04	1.07	.92		
.95	1.05	1.08	.96	.93	.90		.72
	.97	1.01	1.01	.99	1.01		
.92	1.08	1.01	1.01	.30	.67		.23
	1.05 / −1.0 6.6	1.01	RAKE MOUNTING POINT	.30	.77 / −21.5 3.3		.63
1.10	1.09	1.04	.51	.60	.26 / −14.3 24.0		
	.95	1.04	.86	1.07	.57		
1.03	1.06	1.03	1.03	.94	.75		1.04
	1.07	1.06	.86	1.02	1.09		
.95	1.08	1.04	1.03	1.03	.77		1.01

RUN 28 POINT 24 ALPHA= .0 DEG PSI= −.0 DEG
V=60. KNOTS q= 11.4 PSF. CONFIGURATION FHB†

.88	.90	1.00	.96	1.03	1.04		.91
	.86	.98	.92	.86	1.02 / −3.3 −1.4		
.85	.91	.92	.71	1.05	.98		.89
	1.14	.91	.91	1.08	.99		
1.18	1.15	1.57	1.26	.98	1.10		1.23
	1.09	1.08	1.15	1.02	1.26		
.85	1.03	.95	.88	1.05	1.23		1.05
1.04	.94 / −5.7 3.3	.93 / −7.9 .1	.85	1.11	1.16 / −2.3 −3.6 / −1.0 .9		1.02
	1.10	.94	.90	1.34	1.03		
	.87	1.04	1.05	.89	1.02		
.98	.95	.94	.94	1.06	.86		1.07
	.92	.77	.77	.69	.87		
.95	.33	.72	.75	.39	.60		1.05
1.15	.73 / −3.4 −3.8	.77 / −1.7 0	RAKE MOUNTING POINT	1.21	.91 / −.8 4.3 / −.8 3.3		1.04
	.42	.96	.12	.12	.45		
	.96	.91	.59	.59	.95		
1.03	1.05	1.29	.42	1.17	1.00		.95
	.95	.87	.85	1.09	1.02		
.98	1.02	.92	.25	1.11	1.02		.86

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{P_t - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW.
MODEL NOSE, LOOKING AFT.

TABLE X – Continued

Right section

RUN 29 POINT 6 ALPHA=-8.0 DEG PSI=-.0 DEG
V= 60 KNOTS q= 11.4 PSF. CONFIGURATION FHBI

1.02	1.07	.96	1.06	1.05	1.18		1.29
	1.00	.99	1.00	1.06	1.17		1.24
1.05	1.00	1.05	1.03	1.18	1.21		
	.98	1.08	1.02	1.17	1.22		1.21
1.00	.95	1.06	.99	1.17	1.17		
	.95	.98	.99	1.18	1.11		
.93	1.08	.91	.84	1.16	1.12		1.16
.74	1.11 / -8.4 / -.8	.68 / -9.3 / -4.7	.98	1.26	1.11 / -11.0 / .7		.95
	1.19	.64	1.18	1.40	.89 / -9.8 / -1.8		
1.31	1.08	1.27	1.24	1.16	2.52		1.52
	1.50	1.36	1.28	1.57	1.37		
	1.39	1.33	1.19	1.65	1.42		
1.07	1.08	1.05	.71	1.07	1.17		1.23
1.15	1.00 / -11.1 / 1.8	.78 / -12.9 / 18.7	RAKE MOUNTING POINT	.93	.96 / -8.5 / -1.4		1.12
	1.11	.96		.83	.95 / -8.3 / .0		
	1.17	.88		.96	.64		
1.14	1.17	.78	.74	.83	1.26		1.15
	1.02	1.12	.35	.80	.79		
1.08	1.06	1.09	.60	.74	.53		1.18

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

Left section

RUN 29 POINT 5 ALPHA=.0 DEG PSI=-.0 DEG
V= 60 KNOTS q= 11.4 PSF. CONFIGURATION FHBI

.91	.85 / -5.1 / 1.9	.94	.87	.96	1.11		.95
	.93	.89	.86	.85	1.01		
.96	1.00	.69	.92	1.11	.87 / -2.2 / -2.6		.68
	1.08	.97	1.12	.94	.79		
1.07	1.04	1.22	1.14	1.10	1.41		1.32
	1.07	1.19	1.14	1.23	.99		
.95	1.11	.87	.77	1.18	.99		1.00
.85	1.06 / -5.7 / .6	.94	1.09	.92	.89 / .0 / -2.9		.95
	.96	1.01	1.00	1.01	.98		
	.88	1.02	.48	.98	.80		
.95	.98	.95	.87	.37	.82		.92
	.84	.89	.83	.60	.65		
.95	.92	.78	.76	.27	.51		.97
1.10	.91 / -2.1 / -2.1	.64 / -1.3 / 3.6	RAKE MOUNTING POINT	.18	.70 / -5.5 / 1.2		1.06
	1.12	.97		.61	.88 / -1.7 / 3.9		
	1.00	.95		.54	1.11		
1.04	.98	1.06	.60	.85	.99		1.05
	.99	.69	.51	1.32	1.02		
.96	.99	.90	.43	1.01	1.04		1.01

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

TABLE X – Continued

Right table

RUN 29 POINT 8 ALPHA=-4.0 DEG PSI= -.0 DEG
V= 60. KNOTS q = 11.4 PSF. CONFIGURATION FHB*

.98	.99	.99	.99	.93	1.00	1.06
1.00	1.00	.95	1.03	.94	1.08	1.11
	.98	.98	1.07	1.14	1.12	1.18
1.00	1.00	.96	1.04	1.11	1.08	
.99	.95	.85	.98	1.09	1.08	1.15
	.84	.70	.95	1.02	1.04	
.96	1.35	1.15	1.09	.86	1.02	
1.24	1.38	1.22	1.50	1.32	1.17	1.02
	1.06	.93	.99	1.18	1.41	
	1.01	.98	.99	1.16	1.17	
.93	.90	1.10	.72	.64	1.22	.98
	1.09	.83	.82	1.12	1.11	
.98	.89	.97	.91	.65	1.02	.88
1.08	.81	.61	RAKE MOUNTING POINT	1.01	.39	.93
	.96	.70		.43	.70	
	1.18	.43		.58	.25	
1.15	.94	.57	.42	.46	.85	1.04
	1.06	.93	.60	.81	.95	
1.00	1.16	.74	.65	.96	.91	1.10

Boxes (flow direction, degrees): -3.6 / -1.6 ; -4.9 / -1.2 ; -10.8 / -5.0 ; -1.41 ; -10.7 / 1.0 ; -3.7 / .2 ; -6.7 / -3.9 ; -10.0 / -4.2 ; -7.5 / -1.2 ; -9.3 / 3.0

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_P = \dfrac{P_T-P}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW,
MODEL NOSE, LOOKING AFT.

Left table

RUN 29 POINT 7 ALPHA=-8.0 DEG PSI= -.0 DEG
V= 60. KNOTS q = 11.4 PSF. CONFIGURATION FHB*

1.00	1.02	.94	1.00	.90	1.07	1.13
	.98	.92	.99	.93	1.10	1.15
1.01	.98	.97	1.04	1.10	1.03	
	1.03	1.03	1.04	1.03	1.04	1.17
1.01	1.00	1.05	1.07	.92	1.07	
	.93	1.08	.99	.89	1.09	
1.06	.61	1.11	.92	1.05	1.18	1.22
1.21	1.17	1.15	1.55	1.18	1.04	1.16
	1.24	1.28	1.38	1.19	1.09	
	1.18	1.55	1.11	1.10	1.37	
1.21	1.02	1.00	.96	1.02	1.17	.98
	.85	.88	.71	.98	1.18	
.90	.90	.95	.75	1.03	.56	1.40
1.25	1.01	.86	RAKE MOUNTING POINT	.88	1.06	1.20
	1.15	.84		.93	.46	
	.91	.94		.84	.76	
1.14	1.14	.85	.25	.64	.67	1.19
	1.08	.63	.29	.71	.75	
1.01	.82	.80	.40	.37	.94	1.10

Boxes (flow direction, degrees): -16.6 / -4.7 ; -9.9 / -4.8 ; -13.4 / .3 ; -6.1 / .3 ; -8.9 / -2.5 ; -12.1 / -2.3 ; -14.2 / -5.3 ; -10.9 / 2.1 ; -13.5 / .5

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_P = \dfrac{P_T-P}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW,
MODEL NOSE, LOOKING AFT.

TABLE X – Continued

RUN 29 POINT 9 ALPHA= 4.0 DEG PSI= -.0 DEG
V= 60. KNOTS   q = 11.4 PSF.   CONFIGURATION FHBf

.98	.96				
	.93				
	.92				
	.97				
1.05	1.05				
	.92				
.93	.72				
	.87				
.85	.95				
	1.00				
.90	1.00				
	.92				
.93	1.01				
	1.01				
.94	1.02				
1.10	.95				
1.09	1.03				
	.91				
.99	.95				

Boxed values (flow direction, upper = vertical, lower = horizontal):
- −4.6 / −.5
- .7 / −2.1
- −4.2 / −.6
- −.2 / 4.4
- 1.01 / 1.02
- 1.03 / 1.25
- .7 / −2.6
- 2.7 / .2
- .6 / 1.7
- 1.2 / 2.0
- .2 / −4.3

RUN 29 POINT 10 ALPHA= 8.0 DEG PSI= -.0 DEG
V= 60 KNOTS   q = 11.4 PSF.   CONFIGURATION FHBf

.88	.90	.77	.76	.66	.87
	.85	.72	.71	.75	.87
.81	.84	.69	.69	.80	.97
	.87	.57	.81	.86	.97
.98	.71	.58	.86	.84	.64
	.79	.88	.78	1.32	.94
1.04	1.07	.96	.33	.43	.81
.97	.96	.88	.85	.59	.74
	.95	.89	.81	.61	.44
	.95	.69	.96	.44	.90
.97	.93	.79	.88	.86	.93
	.92	.71	.37	.75	1.04
.93	.91	.40	.31	.72	1.11
1.06	.99	.93	RAKE MOUNTING POINT	.64	1.01
	.95	.57		1.03	.94
	.94	.69		.94	.87
1.08	.91	.72	.10	.83	.88
	.92	.79	.49	.80	.89
.99	.91	.57	.43	1.01	.93

Boxed values (flow direction, upper = vertical, lower = horizontal):
- 3.2 / −.4
- 5.3 / −2.4
- .2 / 1.2
- 4.3 / 4.6
- 6.2 / −3.3
- 4.7 / −1.0
- 4.2 / −2.4
- 4.7 / 1.9
- 5.3 / 3.4

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT.

⊕ RAKE MOUNTING POINT
7475 IN

NOTE- TABLE IS SEEN FROM THE FLOW MODEL NOSE, LOOKING AFT.

TABLE X - Continued

RUN 29 POINT 11 ALPHA= .0 DEG PSI=-8.0 DEG CONFIGURATION FHB†
V= 60. KNOTS q = 11.4 PSF.

.96	.93	−7.3 / −7.2	.88	.96	.65	.82	.70
	.98		.96	.82	.99	1.01	.76
1.09	1.08		1.09	.99	1.09	1.01	.58
1.09	1.18		1.08	.91	1.06	1.09	
	1.13		1.07	1.06			1.06
1.09	1.06		1.05	1.09			
1.01	.96		.89	1.01	.68 / −.4 / −5.9		1.01
	.96 / 1.04 / −5.6 / −8.8		.94	.98 / .84 / −3.9 / −7.7	.71		.93
.88	.96		.91	.91	.79		
.86	1.08		.47	.85	.82		.91
	.98		.57	.79	.89		
	.68		.49	.78	.85		
.82	.72		.94	.93	.93 / 1.2 / −5.7		.81
.99	.91 / .72 / −1.9 / −7.2 / −4.6	RAKE MOUNTING POINT	.53 / .80	.86 / .93 / −1.2 / −8.4	.94		.72
	.68		.39	.86	.86		
.96	.59		.81	.88	.81		.78
	.84		.36	.88	.82		.75
.92	.80		.53	.88	.78		.78

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{P_T - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES. UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH. LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

RUN 29 POINT 12 ALPHA=-8.0 DEG PSI=-4.0 DEG CONFIGURATION FHB†
V= 60. KNOTS q = 11.4 PSF.

.95	.93	−14.4 / −9.6	.98	1.02	1.00	1.01	.93
	.87		1.02	.99	1.00	.93	.92
.93	.92		.97	.94	.91	.85	
	.91		.97	.88	.92	.89	.95
.92	.91		.98	.96	.91	.93	
	.96		.96	1.06	.89	.93	
.88	1.00		1.06	1.08	.85	.86	.87
1.05	1.06 / 1.15 / −13.4 / −9.1		1.14 / 1.17	1.18 / 1.14	.67 / 1.28 / −11.1 / 2.8	1.04 / 1.23 / −13.8 / −5.8	.67
	.98		1.14	1.22	1.34	1.30	
1.17	1.02		1.11	.98	1.17	1.16	1.34
	1.17		1.17	.78	.93	1.08	
	1.42		1.11	.66	.75	.94	1.18
.99	.93 / −13.7 / −2.9	RAKE MOUNTING POINT	.97 / .80 / −17.7 / −1.0		1.08 / .72 / −10.0 / −3.5	1.01 / 1.09 / −7.5 / −.4	1.07
1.12	.92				.82	1.08	
1.08	.92		1.25				
	1.04		.89	.71	1.14	1.12	1.00
.93	.88		.89	.59	.91	1.04	
	.87		.43	.71	1.08	1.01	.86

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{P_T - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES. UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH. LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

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TABLE X – Continued

Right block

RUN 29 POINT 14 ALPHA=-4.0 DEG PSI=-4.0 DEG
V= 60 KNOTS q= 11.4 PSF, CONFIGURATION FHBI

1.08	.93	1.08	1.05	1.02	1.02	1.12
	.99	1.11	1.08	1.05	1.02	
.99	1.03	1.07	1.12	1.05	1.02	1.04
	1.06	1.09	1.11	1.08	1.00	
.95	.96	.90	1.06	1.07	1.06	1.06
	.88	.75	.96	1.11	1.16	
.92	1.40	1.67	1.49	.89	1.36	1.00
1.26	1.20 [-8.0 / -9.1]	1.50 [-11.0 / -7.3]	1.42	1.12	1.05 [-6.0 / -3.3]	1.02
	.95	1.31	1.00	1.30	1.30	
	1.02	1.02	1.14	1.26	1.16	
1.19	.89	1.02	1.01	1.21	1.17	.99
	.93	.97	.84	1.10	1.10	
1.04	.89	.93	.81	.95	1.04	1.01
1.12	.94 [-5.8 / 1.7]	.70 [-17.5 / 22.9]	RAKE MOUNTING POINT	.83 [-1.8 / -2.2]	.87 [-0.1 / -1.3]	1.11
	1.04	.69		.90	.87	
	.54	.73		.94	.85	
1.04	.81	.63	.34	1.02	.82	1.12
	.77	.48	.85	1.02	1.01	
1.04	1.07	.71	.99	1.18	1.16	1.04

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS C_p, $\dfrac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

Left block

RUN 29 POINT 13 ALPHA=-8.0 DEG PSI=-4.0 DEG
V= 60 KNOTS q= 11.4 PSF, CONFIGURATION FHBI

1.00	1.02	1.00	1.03	.93	1.11	1.13
	1.00	.97	1.00	.97	1.19	
1.04	.95	1.00	.94	1.04	1.14 [-6.6 / -5.7]	1.13
	.92	1.04	.98	.98	1.05	
1.03	.87	.99	.89	.97	1.02	1.15
	.86	.89	.99	1.13	.99	
.86	1.05	.52	.85	1.28	.98	1.10
1.42	1.19 [-13.4 / -9.2]	1.14 [-12.2 / -8.2]	1.24	1.07 [-10.9 / -8.7]	1.43 [-10.5 / -8.2]	1.24
	1.23	1.23	1.37	1.38	1.51	
	1.11	1.26	1.25	1.36	1.23	
1.03	1.05	1.04	.83	1.17	1.11	1.10
	1.06	1.05	1.14	1.14	1.12	
.94	.80	1.12	1.23	1.01	.96	1.22
1.19	.92 [-16.4 / -2.0]	.95 [-17.0 / -7.0]	RAKE MOUNTING POINT	.71 [-12.3 / -5.0]	.72 [-6.0 / -1.9]	1.19
	.91	.69		.49	.87	
	.99	.51		.89	1.13	
1.13	.89	.82	.31	.91	1.11	1.17
	.98	.79	.45	1.08	1.14	
1.03	.80	.83	.42	1.14	1.11	1.17

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS C_p, $\dfrac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

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TABLE X – Continued

RUN 29 POINT 16 — V = 60. KNOTS — ALPHA = 8.0 DEG — q = 11.4 PSF — PSI = 8.0 DEG — CONFIGURATION FHB?

.94	.99		.94	1.03	1.03	1.07	1.87	.91
.88	1.06		.92	1.10	1.10	.88	1.00	.73
	.95		.94	.89	.89	1.01	.92	
.92	1.01		.91	.88	.88	.72	.76	.99
	1.13		1.03	1.01	1.01	.68	.50	
.89	.99		1.19	1.06	1.06	1.04	.96	
	.96		.94	.89	.89	1.03	1.00	1.18
1.00	.99	[-2.4 / -0]	.76	.75	.93	.86	.85	[-1.0 / 3.7] 1.05
	1.04		1.04	.93		1.22	.91	
.98	1.05		1.08	.96	.94	1.20	.99	1.09
	.99		1.04	.68		.84	.59	
.98	1.16		1.00	.99		.93	.73	1.21
1.13	1.06	[-1 / -19.7]	.99	.99 RAKE MOUNTING POINT	.99	1.04	.28	[1.5 / 8.2] 1.10
	.99		.89	.65		.83	.69	
1.08	1.10		1.00			.85	.35	
	1.10		.98	.79		.53	.99	
1.08	1.04		1.03	.65		1.30	1.23	1.02
	1.04		1.01	.99		.52	.73	
1.00						.65	.82	.93

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P - P_1}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT TO RIGHT LOOKING AFT.

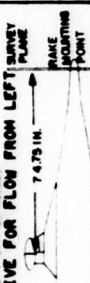NOTE- TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

RUN 29 POINT 15 — V = 60 KNOTS — ALPHA = 4.0 DEG — q = 11.4 PSF — PSI = -4.0 DEG — CONFIGURATION FHB?

.84	[-3.8 / -1.2]	.94	1.06	1.43	.93		.83	.91
.96		1.01	1.02	1.01	.96		.74	.93
.96		1.04	.98	.87	.74	[-2.2 / -6.9]	.79	
1.10		1.13	.81	1.00	.94		.97	1.08
		.92	.91	1.06	.85		.98	
.70		1.04	1.18	1.14	.74		.93	
		1.39	1.38	1.35	.78		.80	.63
1.02	[-5.1 / -6.0]	.91	1.22	1.29	.76	[1.6 / -2.8]	.88	.89
		.80	1.21	.51	.71		.85	
.89		.73	.87	.70	.65		.90	.90
		1.00	1.16	.66	.92		.83	
.85		1.03	.57	.76	.82		.84	.63
1.05	[-2.1 / -.2]	.90	.45 RAKE MOUNTING POINT	.72	.27	[2.3 / -.8]	.88	.84
		.90	.56		.95	[1.5 / -2.7]	1.12	
1.02		.92	.56		.99		.99	.84
		.73	.92	1.03	.98		1.01	
.94	[-.1 / -4.5]	.77	.44	.90	.95		.87	.85
		.89	1.12	.37	.83		.79	
					.78		.79	

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P - P_1}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

TABLE X - Continued

Left panel header: RUN 29 POINT 17 ALPHA=-4.0 DEG PSI= 4.0 DEG CONFIGURATION FHBF
V= 60. KNOTS q= 11.4 PSF.

Right panel header: RUN 30 POINT 6 ALPHA=-4.0 DEG PSI= 4.0 DEG CONFIGURATION FHBF
V= 60 KNOTS q= 11.4 PSF.

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW.
MODEL NOSE, LOOKING AFT.

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TABLE X - Continued

Right section (Point 8):

RUN 30 POINT 8 ALPHA=8.0 DEG PSI= 0.0 DEG
V= 60 KNOTS q= 11.4 PSF. CONFIGURATION FHW

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT DUCT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW,
MODEL NOSE, LOOKING AFT.

Left section (Point 7):

RUN 30 POINT 7 ALPHA=8.0 DEG PSI= 8.0 DEG
V= 60. KNOTS q= 11.4 PSF. CONFIGURATION FHB#

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT DUCT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW,
MODEL NOSE, LOOKING AFT.

TABLE X - Continued

Right panel (RUN 30 POINT 10, ALPHA= .0 DEG, PSI= -.0 DEG):

RUN 30 POINT 10 ALPHA= .0 DEG PSI= -.0 DEG
V= 60 KNOTS q= 11.0 PSF. CONFIGURATION FHBY

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{p-p_\infty}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT TO RIGHT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE
MODEL NOSE, LOOKING AFT.

Left panel (RUN 30 POINT 9, ALPHA= .0 DEG, PSI= 8.0 DEG):

RUN 30 POINT 9 ALPHA= .0 DEG PSI= 8.0 DEG
V= 60. KNOTS q= 11.4 PSF. CONFIGURATION FHBY

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{p-p_\infty}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW,
MODEL NOSE, LOOKING AFT.

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TABLE X - Continued

RUN 31   POINT 6   ALPHA=.0 DEG   PSI=-.0 DEG
V=100 KNOTS   q= 30.0 PSF.   CONFIGURATION FHBW

RUN 31   POINT 5   ALPHA=-4.0 DEG   PSI=-.0 DEG
V=100. KNOTS   q= 30.8 PSF.   CONFIGURATION FHBW

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS C_p, $\dfrac{p-p_\infty}{q}$.

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE OLD MODEL NOSE, LOOKING AFT.

TABLE X - Continued

RUN 31 POINT 8 ALPHA= 6.0 DEG PSI= -.0 DEG CONFIGURATION FHB!
V= 100 KNOTS q= 30.0 PSF.

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

RUN 31 POINT 7 ALPHA= 4.0 DEG PSI= -.0 DEG CONFIGURATION FHB!
V= 100 KNOTS q= 30.0 PSF.

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

TABLE X - Continued

RUN 31 POINT 9 ALPHA=-4.0 DEG PSI=-.0 DEG
V=100 KNOTS q = 30.8 PSF. CONFIGURATION FHB1

RUN 31 POINT 10 ALPHA= .0 DEG PSI= -.0 DEG
V=100 KNOTS q = 30.8 PSF. CONFIGURATION FHB1

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_t - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE. LOOKING AFT.

RAKE
MOUNTING
POINT

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TABLE X – Continued

RUN 31 POINT 11 ALPHA=.0 DEG PSI=-4.0 DEG
V= 100. KNOTS q= 30.0 PSF. CONFIGURATION FHBf

RUN 31 POINT 12 ALPHA= 4.0 DEG PSI=-4.0 DEG
V= 100. KNOTS q= 30.0 PSF. CONFIGURATION FHBf

RAKE MOUNTING POINT

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_t - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE TO RIGHT LOOKING AFT.

7.475 IN

RAKE MOUNTING POINT

NOTE- TABLE IS SEEN FROM THE FLOW. MODEL NOSE, LOOKING AFT.

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TABLE X – Continued

Bottom-left table

RUN 31 POINT 13 ALPHA= 4.0 DEG PSI=-4.0 DEG
V=100 KNOTS q= 30.8 PSF. CONFIGURATION FHBf

.98	.96	1.6 / -1.1	.96	1.04	1.00	.95
.96	.96		.99	.96	.98	.97	.86
.96	.99		1.02	.98	.99	.83	.84
.79	.98		.65	.87	.93	1.06	.93
.98	.95		1.09	.97	1.08	.88	.93
	.84		.96	.78	.85	1.06	
.98	.83		1.07	.94	1.12	4.2 / -3.8 1.03	
.91	.57 / -6.5 -5.5 .87	1.02	.87	.94		
	.74	.54	.93	.88	5.1 / -1.7 .95	
.99	.92	1.00	1.08	.72	1.01	
	.98	RAKE MOUNTING POINT -.05	.52	.90		
1.00	.82	.82	.65	.95	.99	
1.00	.70 / -5.2 -.5 .76	.62	.72	.92		4.4 / -4.9 .95
	.92	1.00	.52	.91		
1.02	.71	.90	.68	.99	1.00	.94
	.82	.67	.56	1.01	.97	
.98	.74	.85	.66	.99	.91	.93

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_t - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE TO RIGHT LOOKING AFT.

7.475 IN. RAKE MOUNTING POINT

NOTE- TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

Top-right table

RUN 31 POINT 14 ALPHA= 4.0 DEG PSI=-4.0 DEG
V=100 KNOTS q= 30.8 PSF. CONFIGURATION FHBf

.98	.96	-.7 / -.9 .96	.96	.85	.97	.96
.93	1.01		1.00	1.02	.92	.81	.91
.97	.93		.95	.80	.89	5.0 / -5.3 1.03	
	.96		.95	.92	1.10	.68	
.99	.96		.86	.78	.87	.96	
	1.05		.90	.98	1.09	1.02	
	.73	2.6 / -5.8	1.00	.80	.89	.93	
.97	.83 / -6.4 -2.8 .80	.87	.96	1.23	3.9 / -2.6 .98 1.01	
	.86		.70	.59	.92	1.07	
.90	.74	1.2 / -2.7 .87	.85	.26	1.03	.99	
1.01	.42		1.08	.79	.57	1.08	.96
	.63 / -5.8 .80	.33	.93	.84		
1.02	.70		.92	.55	.64	3.5 / -4.2 .90 4.4 / -1.3 1.04	
	1.01		.49	RAKE MOUNTING POINT .96	.98 1.06	
1.02	.80		.53	.99	.96	
	.73		.81	1.00	1.03	
1.00	.75		.63	.42	1.11	1.02

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_t - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE TO RIGHT LOOKING AFT.

7.475 IN. RAKE MOUNTING POINT

NOTE- TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

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TABLE X - Continued

RUN 31   POINT 15   ALPHA=4.0 DEG   PSI= 4.0 DEG
V=100 KNOTS   q= 30.8 PSF   CONFIGURATION FHBM

1.00	1.00	.96	1.00	.96	.92	.90
	1.01	1.00	.94	.97	.91	
.95	1.01	.96	.99	-4.3 / 3.0	.93	.96
	1.01	.95	.93	.92	.91	
1.02	.98	1.13	.98	.94	.97	.96
	1.04	.97	.99	.97	.99	
1.07	1.03	1.01	.95	.99	.71	1.05
.93	.20 / .82	1.05	1.06	1.06	.98	-5.8 / 1.6 .89
	.82	.91	.96	.76	.97	
	1.21	1.04	.92	.97	.70	
.99	.95	1.03	.89	.79	.62	1.25
	.86	.59	.57	.83	.74	
.94	1.03	.51	.73	.88	1.29	.83
1.05	.95 / -4.4 / 5.2	.89	RAKE MOUNTING POINT	.78 / -24.7 / 4.6	.63	-1.4 / 3.9 .84
	.99	.83	.43	.84	.67	
	1.0?	.91	.44	.88	.97	
1.02	.95	.98	.67	.56	.92	.85
	.96	.87		.52	.99	
.99	1.01	.95		.86	.81	.94

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_P = \dfrac{P - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

RAKE MOUNTING POINT

RUN 31   POINT 16   ALPHA= .0 DEG   PSI= 4.0 DEG
V=100. KNOTS   q= 30.8 PSF   CONFIGURATION FHBI

.97	.96	1.03	.99	.99	1.03	1.03
	.95	.93	1.03	1.04	1.01	
.96	.98	1.01	.95	1.01	-3.5 / .6 1.19	1.16
	.91	1.04	1.00	1.12	.95	
.95	1.04	.90	1.06	.87	1.03	1.08
	.63	1.08	1.00	1.07	.90	
1.15	1.05	1.16	1.01	1.13	1.02	.82
.95	.82 / -2.8 / 1.8	1.04	.99	.95	-1.4 / .2 .76	.97
	1.00	.97	.89	.89	1.26	
	.99	.96	1.02	1.09	.73	
.96	.97	1.04	.92	.99	.81	1.09
	.97	1.06	1.13	.99	1.07	
1.01	1.01	.90	.98	1.32	.94	.94
1.00	.95 / -1.1 / 4.5 1.04	.39 / -2.8 / 4.5 1.03	RAKE MOUNTING POINT	.49 / -22.6 / 9.1 .56	-3.1 / -3.7 .94	1.08
	.97	.95	1.02	.31	.72	
1.02	.98	.67	.46	.96	.92	1.14
	1.01	.98	.71	.78	.77	
.99	.95	1.01	1.03	.82	.58	1.00

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_P = \dfrac{P - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

RAKE MOUNTING POINT

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TABLE X – Continued

RUN 31 POINT 18 ALPHA= .0 DEG PSI= 4.0 DEG
V=100 KNOTS q= 30.8 PSF. CONFIGURATION FHBf

.96	.97	.96	.98	.97	1.00	1.03
.99	.97	.99	.97	.99	1.03	
.99	.99	.99	1.04	.99	1.06	1.08
.96	1.01	1.00	1.05	1.00	1.03	
.98	1.01	1.01	1.07	1.01	1.08	1.03
.90	.98	.98	1.04	.98	1.02	
1.00	.83	.96	.97	.83	.90	.97
.96	1.06	.87	.81	1.06	.62	
-2.5 / 2.5			-1.6 / 2.8	-1.9 / -.2		
1.03	.75	.93	1.00	.75	.90	1.04
.97	.96	1.07	.91	.96	.82	
.90	.93	.95	.82	.93	.82	.93
.98	.86	.77	.70	.86	.61	
.97	.99	.41	.66	.99	.61	.99
-1.9 / 5.2		RAKE MOUNTING POINT	-.9 / .8	-.7 / 4.2	-.1 / -19.5	
.99	.64		.77	.64	.83	1.00
.96	.97		.73	.97	1.05	
1.00	1.02	.50	.65	1.02	.90	
.93	1.01	.80	.97	1.01	.92	1.00
1.01	1.00	.84	1.00	1.00	1.12	
.99	1.04		.70	1.04	.95	1.03

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_t - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE.
TO RIGHT LOOKING AFT.

|← 7.475 IN →|

NOTE- TABLE IS SEEN FROM THE FLOW,
MODEL NOSE, LOOKING AFT.

RUN 31 POINT 17 ALPHA= .0 DEG PSI= 4.0 DEG
V=100. KNOTS q= 30.8 PSF. CONFIGURATION FHBf

1.00	.98	.99	.92	1.02	1.04	.90
.95	1.02	.95	.99	.95	.91	
.98	.94	.98	.93	.98	.97	.94
.99	1.00	.92	1.01	.92	.85	
.98	.97	.99	.98	.99	.94	.91
1.03	1.01	1.02	.90	1.01	.79	
.95	1.03	1.02	.95	1.03	1.15	.99
.89	1.11	1.04	1.16	1.04	.88	.91
-5.2 / 1.4			-2.5 / 2.2	-10.8 / 2.1	-1.2 / .5	
.99	.86	1.24	.74	1.24	.72	1.05
.97	1.08	.72	.92	.72	.77	
.98	.88	.45	.90	.45	.52	.95
.94	.87	.56	.71	.56	.78	
.98	.98	.58	1.05	.58	.70	
-2.7 / -4.0		RAKE MOUNTING POINT	-25.7 / .2	-1.6 / 2.6		
.91	.87		.46	.52	.88	
.98	1.14		.65	.78		
.97	.88	.95	.45			
.92	1.00	.43	.64	1.15	.94	
.98	.98	.12	.74	.91		
.97	.92	.86	.66	1.02	.95	

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_t - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE.
TO RIGHT LOOKING AFT.

|← 7.475 IN →|

NOTE- TABLE IS SEEN FROM THE FLOW,
MODEL NOSE, LOOKING AFT.

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TABLE X - Continued

Right sub-table:

RUN 31 POINT 20 ALPHA= 4.0 DEG PSI= 4.0 DEG
V= 100 KNOTS q= 30.8 PSF. CONFIGURATION FHB1

Left sub-table:

RUN 31 POINT 19 ALPHA= 4.0 DEG PSI= 4.0 DEG
V= 100 KNOTS q= 30.8 PSF. CONFIGURATION FHB1

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT.
7.475 IN — RAKE MOUNTING POINT

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

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TABLE X – Continued

RUN 31 POINT 21   ALPHA= 4.0 DEG   PSI= 4.0 DEG
V= 100 KNOTS   q= 30.8 PSF.   CONFIGURATION FHBf

			RAKE MOUNTING POINT			
.98	.98	.95	.99	.98	1.00	.95
	.96	.99	1.00	.99	.97	
.92	.94	.93	.99	1.00	.96	.98
	.85	.98	.96	.94	.87	
.96	.89	.84	.92	.99	.88	
	.98	.97	.84	.67	.73	1.03
.98	.98	.77	.73	.50	.89	
.97	.97	.97	.93	.89	.67	.91
	.93	.98	.72	.75	.74	1.00
	.97	.91	.65	.89	.29	
.97	1.02	1.04	.84	.63	.37	1.04
	1.04	1.02	.46	.54	.36	
1.01	1.03	1.05	.71	.66	.53	1.06
1.03	.98	.99	.64	.64	.76	1.00
	.99	.84		.75	.85	
	.96	1.03	1.07	.58	1.07	
1.02	.96	.98	.67	.59	.46	.98
	.98	.94	.90	.48	1.04	
.98	.95	1.00	.80	.58	.53	.97

Boxed values (left table): 3.0 / 2.8 · 1.8 / 2.3 · 1.5 / 2.4 · 3.1 / 1.7 · 4.1 / -6.9 · -7.8 / 2.0 · 3.5 / 1.0 · -7.6 / -5.3 · 4.5 / -5.8

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS C_p, $\frac{P-P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT.

7.475 IN   RAKE MOUNTING POINT

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

RUN 31 POINT 22   ALPHA= .0 DEG   PSI=-4.0 DEG
V= 100 KNOTS   q= 30.8 PSF.   CONFIGURATION FHBf

			RAKE MOUNTING POINT			
.99	.98	.98	1.01	1.31	.92	1.01
	.96	1.03	.78	.83	1.03	
.97	.94	.89	.99	1.19	.81	.92
	1.05	.95	.90	.81	1.03	
.96	.80	.99	1.05	.96	1.07	1.01
	1.03	.86	1.01	1.38	1.05	
1.06	1.02	.95	1.21	.88	1.03	1.09
1.02	.94	.89	.81	1.02	.95	.92
	1.01	.67	.79	.87	.95	
.95	1.03	.75	.66	.41	.97	1.00
	.60	.99	.69	.57	.79	
.96	.64	.57	1.26	.60	.96	.97
	.78	.84	.64	.75	.93	
1.02	.56	.69		.49	.96	.91
	.63	.88		.70	1.01	
	.67	.33		1.06	1.02	
1.01	.99	1.04	.56	.98	.93	.94
	.82	.62	.80	1.01	.98	
.98	.86	.61	.46	.97	.91	.94

Boxed values (right table): -9.4 / -3.6 · -6.5 / -6.4 · 1.1 / -5.6 · -.2 / -3.2 · -1.6 / -2.0 · -18.7 / 1.0 · 1.5 / -5.7 · .2 / -2.8 · .8 / -1.9

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS C_p, $\frac{P-P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT.

7.475 IN   RAKE MOUNTING POINT

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

TABLE X – Continued

RUN 33   POINT 4   ALPHA= .0 DEG   PSI= -.0 DEG
V= 125. KNOTS   q= 48.1 PSF.   CONFIGURATION FHBf

.99	.97	.96	.94		.95		.99
	1.00	.98	.98		.97		
1.00	.97	.98	.97		.97	.95	.97
	1.01	.98	1.01		.96	.96	
1.02	.92	.98	.94		.99	.96	.87
	.90	1.01	.96		.97	.97	
.79	1.02	.97	.98		.85	.94	.90
[.8 / -.1]	.89 [-.3 / -2.7]	.92 [-2.0 / -.1]	.83		.84 [-5.8 / -.3]	.84	.99
.95	.76	.87	.88		.79	.88	
	.98	.90	.79		.98	1.01	.98
.94	1.03	1.01	1.04		.97	.79	
	.69	.69	.78		.81	.64	1.01
	.57	.31		RAKE MOUNTING POINT ⊕	.38	.56	
1.00		.54	.92	.67 [-.7 / -3.1]	.43 [-3.4 / -4.4]	1.01
[1.0 / 1.3]	.91 [-3.2 / 2.8]	.59		.79	.84	
.98	.83	.82	.44	.86	.43	1.01
	1.00	.62	.37			
1.00	.93	.94		.95	.60	1.02
	.99	1.00	.31	.94	.79	
1.02	.97	.93		.95	.97	.99

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT.

◄——— 7475 IN

RAKE MOUNTING POINT

NOTE– TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

RUN 31   POINT 23   ALPHA= .0 DEG   PSI= -.0 DEG
V= 100. KNOTS   q= 30.8 PSF.   CONFIGURATION FHBf

.97	.88	1.00	.92		.97	.96	.94
.84	1.00	.91	1.03		.97	.97	
	.84	1.01	.91		.99	.94	.98
1.08	.91	.69	1.00		.95	1.00	
	.73	.93	.83		1.02	.95	.85
.88	1.09	.81	.94		.98	.94	
	.69	1.10	.99		1.03	1.03	1.02
.98 [-.8 / -.9]	1.26 [-1.8 / -3.1]	.66	1.14		.98 [-7.4 / -2.4]	1.12 [-4.0 / -.3]	.94
	.67	1.11	.84		.99	.86	
.97	1.00	.51	.84		.88	1.03	.96
	.90	.56	.82		.85	.84	
	.31	.34	.68		.81	.86	.98
1.01	.20	.30			.79	.85	
.95 [-.9 / .8]	.79 [-3.8 / 3.1]	.39	.43		.82 [-5.9 / -.4]	1.03 [-1.0 / -3.9]
	.39	.90	.36	RAKE MOUNTING POINT ⊕	.43	.43	1.03
.96	.74	1.09	.76		.83		
	.93	.94	.29		.54	.98	1.02
	.90	1.00	.52		.96	1.11	
.92	.96	.75	.55		.99	.98	.98

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT.

◄——— 7475 IN

RAKE MOUNTING POINT

NOTE– TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

TABLE X – Continued

RUN 33 POINT 6 ALPHA= .0 DEG PSI= -.0 DEG CONFIGURATION FHBf
V=125. KNOTS q= 48.1 PSF.

		.98	.98	1.01	.98	.93	.96	
		.99	1.00	1.00	.98	.93	.95	
		1.00	.97	.99	.95	.93		
		.99	.99	1.01	.97	.93	.96	
		1.00	1.03	1.00	.99	.95		
.99		.95	1.00	.95	.95	.90		
.99		1.02	.95	.91	.87	.98		
1.00	-.7 / .3	.71 / 1.04	.84 / .96	.92 / .90	.89 / -2.7 / -4.0	1.04 / .89	.99	.6 / -1.0
.99		.76	1.01	.79	1.00	1.04	.97	2.1
1.03		.77	.98	.86	.59	.94	.96	
.98		.91	.59	.96	.48	.71		
1.04	.7 / -2.6	.58 / .42 / .43	.15 / .77 / .55	.63	.60 / .69	.93 / .75 / .97	.97	.7 / 2.1
.99		1.08	.62	RAKE MOUNTING POINT	.69 / .62	1.05	.93	
.97		1.03	1.04	.47	1.02	.95	.95	
		.95	1.02	.47	.91	.87		
		.94	.92	.41	.88	.95		
					.87			

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_P = \dfrac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT.

NOTE– TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

RUN 33 POINT 5 ALPHA= .0 DEG PSI= -.0 DEG CONFIGURATION FHBf
V=125 KNOTS q= 48.1 PSF.

.99	-1.4 / .5	.96	.98	.97	.98	1.00	1.03
.99		.99	.97	.99	.98	1.02	1.00
.99		.97	.98	1.00	1.04	.97	.96
.98		.98	.97	.97	1.00	1.01	
.95		.95	.97	.98	1.00	.92	.98
		.98	1.00	.97	.94	.93	
.95		.90	.87	1.02	1.03	1.05	
.97	-4.6 / -.9	.95 / 1.06	.94 / .87	.87 / .89	.97 / 1.07	.95 / 1.09	1.6 / -.8 .98
.97		1.06	.82	.91	.62	.45	
1.02		.91	.62	.83	.63	.46	.96
		.47	.82	.87	.74	1.00	
		.23	.59	.74	.37	.14	.99
1.01	-.4 / -3.3	1.06 / .59	.55 / .55	RAKE MOUNTING POINT	.30 / 1.05	.88 / .65	1.5 / 2.9 .99
1.10		.86	.51	.65	.62	.92	1.01
.99		.95	1.08	.80	.89	.93	1.01
		1.02	.84		.87	1.04	
		.93	1.07	.33	.81	1.01	1.05

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_P = \dfrac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT.

NOTE– TABLE IS SEEN FROM THE FLOW
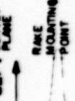MODEL NOSE, LOOKING AFT.

TABLE X – Continued

RUN 33 POINT 8 — ALPHA= 4.0 DEG PSI= -.0 DEG — CONFIGURATION FHBI
V= 125 KNOTS q= 48.1 PSF

.98		.95	.99	.97	.95	.95
.85		.97	.98	.96	.94	.92
		.93	.94	1.00	.93	1.13	.94
.96		.97	.96	.92	.94	.92
		.95	1.05	.95	.98	.97
1.02		.97	1.00	.90	.89	.96
	1.00	.79	.97	.70	.96	.95
.96	[3.3 / .9] .92	[-2.6 / 1.4] .71	1.17	.79 / .68	[7.9 / -.6] .98
	.84	.77	.83	.67 / .90	
1.00	.99	.63	1.18	.94 / .65	.96
	.43	.81	.54	.82 / .48	
1.00	.91	.77	.70	1.01 / .57	.97
	.98	.69	.28 RAKE MOUNTING POINT	.29 / .97	
1.11	[2.4 / -4.2] .57	[-1.6 / -.3] .42 / 1.06	.33 / .86	[4.3 / 2.2] .91
	.96	.22	.69 / .93	
	1.00	1.01	.98	.98	.92
1.00	.98	1.01	.78	.93 / .95	
	1.01	.75	.43	.99 / .95	
.99	.95	.88	.37	.89 / .92	.94

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT.

7.475 IN RAKE MOUNTING POINT

NOTE- TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

RUN 33 POINT 7 — ALPHA= 4.0 DEG PSI= -.0 DEG — CONFIGURATION FHBI
V= 125. KNOTS q= 48.1 PSF

.98		.96	1.00	.92	.94	.96
1.00		.97	1.00	.97	.95	.93
1.00		.94	1.01	.95	.96	.80	.99
1.00		.98	1.01	.95	.96	.93
1.00		.90	.89	.98	1.00	1.00	.96
1.00		.97	.96	.92	.98	1.04
1.00	[3.3 / 1.5]	.73	1.01	.95	.91	
.99	[.1 / -.3] .96	.67	[2.8 / -2.4] [9.2 / -1.2] .99 / 1.11	1.00
1.00	.97	.80	.84 / .45	
.97	1.25	.48	.83 / .76	
1.00	.59	.36	.07 / .26	1.00
.53	.15	.53	1.08 / .58	
.98	.40	.36 .76	1.00 / .71	.98
1.05	[3.8 / -3.5] [1.7 / 2.0] .65 / .90 RAKE MOUNTING POINT	.41	[2.0 / 1.7] [4.4 / 1.8] .89 / .92	1.03
	.95	.27	.98 / 1.00	
1.01	.87	.79	.23	.68 / .92	.98
1.00	1.05	.66	.27	.92 / .67	
.99	.85	.23	.97	
1.00	.93	.84	.62	.84 / .94	.96

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT.

7.475 IN RAKE MOUNTING POINT

NOTE- TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

TABLE X – Continued

RUN 33   POINT 10   ALPHA= .0 DEG   PSI=-4.0 DEG
V=125 KNOTS   q= 48.1 PSF.   CONFIGURATION FHB1

.96		.92	.97	.97	.98	.96
.98		.97	.97	.96	.96	.94
		.93	.97	.93	.95	.97
.96		.96	.98	.98	.98	
.98		.86	.93	.95	.98	.96
.94		.90	.99	1.08	.94	
		.99	.93	.90	.95	
.93		.97	.99	.79	.97	.96
.95	1.3/-3.7	.81	1.02	.89	.96	.99
		1.01	.92	.81	.96	
.98		.50	.51	.78	.91	.99
		.70	.44	.68	.89	
.97		.72	.73	.68	.83	
1.01	1.1/-1.7	.91	.66	.64	.97	.99
		.96	.90	.90	.99	.95
		.96	1.10	1.10	1.02	
.99		1.00	.98	.88	.99	.96
		1.00	.80	1.08	.99	
.98		.95	.22	.56	.96	.94

Boxes: 1.2/-5.7, 1.6/-5.4, .3/-.3, -9.2/-6.6, -13.0/-.8, -3.8/-1.1, -1.4/-5.9, RAKE MOUNTING POINT

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $c_p = \dfrac{P-P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT. 7475 IN.

NOTE- TABLE IS SEEN FROM THE FLOW MODEL NOSE, LOOKING AFT.

RUN 33   POINT 9   ALPHA= 4.0 DEG   PSI=-4.0 DEG
V=125 KNOTS   q= 48.1 PSF.   CONFIGURATION FHB1

.07		.98	.97	1.00	.98	.89
		.97	1.00	.93	.96	
.98		.99	.97	.97	.92	.96
		.97	1.02	.97	.95	
.92		.97	.97	.99	.93	1.01
		.78	.86	1.00	.92	
.98		.81	1.02	.98	1.03	.97
.98		.84	.94	1.03	1.07	.97
	5.2/-3.3	1.06	.84	.96	.26	
		1.07	1.33	.67	.96	1.00
.95		.72	.54	.19	.73	
.53		.64	.26	.53	.77	.98
		.54	.99	.33	.98	
.98	4.9/-1.8	.51	.73	1.13	.92	
		.98	.63	1.02	1.01	
1.01		.69	.89	.95	.99	.96
		.37	.52	.95	.98	
.98		.57	1.05	1.03	.97	.95
		1.02	.71	.91	.94	

Boxes: .2/-1.9, 5.5/-5.1, 5.1/-5.2, 4.0/-4.3, .8/-11.6, -6.7/-3.9, -4.8/-.4, RAKE MOUNTING POINT

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $c_p = \dfrac{P-P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT. 7475 IN.

NOTE- TABLE IS SEEN FROM THE FLOW MODEL NOSE, LOOKING AFT.

TABLE X – Continued

RUN 33 POINT 12 ALPHA= .0 DEG PSI=-2.0 DEG CONFIGURATION FHBf
V= 125. KNOTS q= 48.1 PSF.

.94	.93	.94	.98	1.00	.96			.99
.90	.95	.98	.97	.96	.98			.98
.96	.89	.97	.95	.99	1.00			.95
1.02	.95	.92	.94	.99	.98			.99
.96	.91	.96	.97	.99	.97			
1.02	1.00	.93	.98	.99	.99			.99
.99	1.08	1.00	.97	.95	.98			.99
	.98 [1.3/-5.6]	1.06	.92	.98 [-7.7/-4.0]	.88 [-2.8/.0]			.98
	.96	.86	.91	1.07	1.00			
	.94	.52	.57	.91	.70			.97
1.02 [1.5/-2.9]	.67	.52	.82	1.03	1.02			.98
	1.01	.20	.34	1.04	.84			
	1.00	1.01	.66 RAKE MOUNTING POINT	.93	.87			1.01 [-1.4/-4.4]
	.98 [-1.2/.3]	.77	.55	.76 [-3.4/-11.5]	.22 [-4.4]			1.03
.9b [1.2/.0]	1.01	.95	.69	.52	.48			
	.98	1.09	.80	.42	.30			.99
.97	.98	.99		.50	1.14			
.93	1.00	1.04		.59	.92			
	.97	1.01		.76	.98			

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{P_r - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT.

← 7475 IN → RAKE MOUNTING POINT

NOTE- TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

RUN 33 POINT 11 ALPHA= .0 DEG PSI=-2.0 DEG CONFIGURATION FHBf
V=125 KNOTS q= 48.1 PSF.

.97	.94	.97	.96	.97	.95			.99
.99	.98	.95	1.00	.97	.94			.97
.99	.95	1.03	.94	.98	.96			.97
.99	.92	.88	1.03	.97	.94			.94
	.94	.98	.89	1.02	.95			
.96	.93	.89	.92	.97	.92			.91
	[1.0/-2.4] .91	.94	.99	1.01	.92 [-3.6/-1.2]			.98
.99	[−.1/-4.6] 1.04	1.30	.90	.92 [-7.8/-3.7]	.84			
	.99	.89	.95	.84	.96			.93
1.00	.74	.47	.69	.89	.75			
	.87	.69	.49	1.13	.68			.95
.95	1.05	.65	.34	.90	.76			.9b
	[.4/.2] .93	1.00	.56 RAKE MOUNTING POINT	1.14	.50			
1.00	[.1/-3.1] 1.05	.48		.58 [-7.2/-4.8]	.73 [−.1/-1.2]			.9b
	.98	1.04	.90	.48	.72			
.97	.95	.92	.39	.51	.77			.97
	.94	.98	.61	.76	.97			1.03
.99	1.03	.94		.81	1.03			1.04
		1.00		.49	1.04			

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{P_r - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT.

← 7475 IN → RAKE MOUNTING POINT

NOTE- TABLE IS SEEN FROM THE FLOW, MODEL NOSE, LOOKING AFT.

TABLE X - Continued

Left Table (Point 13)

.98	.96		.94	.95	1.04	1.00	
	.99		.95	.98	.98	1.01	
.93	.99		.95	.96	.99	.98	1.00
	.99		.94	.97	.97	.97	
.97	.96		.98	.89	.91	.97	.95
	1.02		.92	.94	.95	.92	
.94	.70		.92	.95	1.00	.97	.98
1.00	.98 -6.4 -2.8		.91	1.02	1.01 .3 -3.5	.95	
	.96		.89	.95	.99	1.01	.99
.99	1.16		.72	.94	1.06	1.04	
	.78		.35	.70	.70	.98	
.99	.99		.20	.74	.78	.90	
1.01	.81		.48	.75	.45	.93	
1.04	.11 -12.9 -7.0		.94 RAKE MOUNTING POINT	-.01 .55	.94 -1.3 1.0	1.05 .85	
	.72				.86		
	1.00			.92	1.09	.98	
1.01	.78		.79	.34	.88	1.03	
	1.14		.50	.87	1.01	1.01	
.99	.96 2 -5.0		.43	.80	1.05 1.2 -.0	1.03	

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_t - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW,
MODEL NOSE, LOOKING AFT.

Right Table (Point 14)

.98	.94	.98	.97	.94	.95	.89	.94
.99	.99	1.00	1.00	.98	.95	.96	.92
.99	.99	.99	.96	.92	.90	.90	.92
	1.00	1.00	.96	.94	.99	.94	.98
.99	.94	.81	.97	1.00	.94	1.01	
	.99	.90	1.00	.93	.99	.95	
.97	.92	1.39	.89	1.07	.92	.93	.98
.99	1.6 .6 .90 1.19	1.39	-6.4 -.6 .91 .57	.99 .78	.97 .76	.98 .99	
.98	.89	.34	.71	.31	.88	.82	.94
	.34	1.07	.69	.35	.32	.96	
.98	.27	1.07	.40	1.28	.78	1.09	.99
1.01	3.8 -6.2 .80 1.02	.27	.4 .4 .72 .97	.62 RAKE MOUNTING POINT	1.12 1.00	.95	.94
	.85		.69		.94		
1.02	1.00	1.00	1.01	.78	.98	.97	.92
	1.01	1.01	.43	.44	.93	.96	
.98	1.00	1.00	.53	.50	.95	.92	.95

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_t - P_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY PLANE
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW,
MODEL NOSE, LOOKING AFT.

TABLE X - Continued

Right table:

RUN 33 POINT 16 ALPHA= 4.0 DEG PSI=-2.0 DEG
V= 125. KNOTS q = 48.1 PSF. CONFIGURATION FHB1

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $c_p = \dfrac{p_t - p_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION, IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

RAKE MOUNTING POINT

Left table:

RUN 33 POINT 15 ALPHA= 4.0 DEG PSI=-2.0 DEG
V= 125 KNOTS q = 48.1 PSF. CONFIGURATION FHB1

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $c_p = \dfrac{p_t - p_s}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION, IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT SURVEY
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW
MODEL NOSE, LOOKING AFT.

RAKE MOUNTING POINT

TABLE X - Continued

Point 16

RUN 33   POINT 16   ALPHA= .0 DEG   PSI= 2.0 DEG
V= 125 KNOTS   q= 48.1 PSF.   CONFIGURATION FHBI

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{P_7-P_8}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW,
MODEL NOSE, LOOKING AFT.

RAKE MOUNTING POINT

Point 17

RUN 33   POINT 17   ALPHA= .0 DEG   PSI= 2.0 DEG
V= 125 KNOTS   q= 48.1 PSF.   CONFIGURATION FHBI

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{P_7-P_8}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT
TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW,
MODEL NOSE, LOOKING AFT.

RAKE MOUNTING POINT

TABLE X - Continued

RUN 33 POINT 19 ALPHA= 4.0 DEG PSI= 2.0 DEG
V=125 KNOTS q= 48.1 PSF. CONFIGURATION FHBf

.98	[5.9 / 2.7]	.99	1.00	.99	.98	.91
.92		.97	1.00	.98	.99	2.0 / -.2	.99	.92
.94		.99	1.00	.96	.99	.93	.99
1.00		.91	1.00	.91	.91	.95
.98		1.01	.81	.89	.90	[6.0 / 6]	.86
.94		.98	.99	.84	.89	.99
1.00		.97	.89	1.0b	.66		1.04
1.00		.99	[1.7/1.2]	.99	1.04	.71	[-.1/-2.3]	.79
1.02		.9b	.94	HAKE MOUNTING POINT	.77	.94	.77
1.03		.96	.83	.72	.74	[4.4/4.8] 1.04
1.00		.16	.63	.54	.52
		1.0b	.20	.99	.57
		1.00	.88	.72	.50
		1.00	.83	.82	1.00
1.02	[3.0/-1.9]	1.10	[1.4/3.b] .94	.45	.54	[1.2/1.9] .9b	1.00
1.03		.91	.82	.99	1.10	.94
1.00		1.01	1.03	1.08	.9b
		.95	1.00	.7b	.9b
		.97	.41	.87	.94
1.00		.97	.59	.89	1.02	.99

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW MODEL NOSE, LOOKING AFT.

RUN 33 POINT 20 ALPHA= 4.0 DEG PSI= 2.0 DEG
V=125 KNOTS q= 48.1 PSF. CONFIGURATION FHBf

.97	.98	.98	1.01	1.00	.95	.93
.95	.99	.98	.95	.98	2.2/-.8	.91
.9b	[3.5/1.7] .98	1.11	1.00	1.03	.98	1.00
	.91	.89	.98	.89	.7A
.90	.90	.97	.98	.95	.97
.94	.86	.93	.89	1.13
.98	.93	1.01	.82	1.08	.95
.97	[-.8/-.8] .96	1.03	.83	.76	1.7/-4.7 1.07	4.0/1.4 1.00
	.94	.60	.75	.67	.80	.51
	.93	.99	.99	.83	.93
.97	.92	.20	1.07	.81	.93
	.89	.45	.2b	.69	.63
.9	1.01	.72	.82	.51	.8b
1.00	[3.5/-1.5] .9b	1.9/4.0 1.15	RAKE MOUNTING POINT	.8b	[-1.4/-.9] .81	3.2/4.3 .95
.9	.97	.42	.45	.95
.96	1.00	.93	.64	.93
	.95	.88	.60	.53	.92	.90
	1.02	1.02	.21	.51	.97
	1.00	.95	.46	.73	.94	.9

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \frac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH.
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT TO RIGHT LOOKING AFT.

NOTE- TABLE IS SEEN FROM THE FLOW MODEL NOSE, LOOKING AFT.

TABLE X - Concluded

RUN 33 POINT 21 ALPHA= .0 DEG PSI= -.0 DEG
V=125. KNOTS q = 48.1 PSF. CONFIGURATION FHBf

.98	.97	.95	.96	.92	.99	.99
	.99	.96	.97	.99	1.00	
1.00	.98	.98	.99	.98	[-.5 / -2.7] 1.00	.95
	.98	.96	.96	1.00	.99	
.98	.96	.94	.99	.96	1.03	1.00
	1.02	1.00	.97	.95	.93	
.95	.88	.97	.87	.96	.90	1.08
	.92	.94	1.11	.95	.92	
.98	[-1.2 / .9] .83	[-4.0 / -.0] 1.01	.90	[-1.6 / -5.6] 1.04	.95	[1.1 / -.8] .98
	.80	1.16	.78	.71	.92	
.98	.89	.72	1.26	.37	1.40	1.04
	.53	.39	.80	.22	.74	
.97	.76	.57	.85	.70	.67	.96
	1.13	.40	RAKE MOUNTING ⊕ POINT	.74	1.03	
1.03	[.6 / -3.1] .95	[-3.7 / -5.7] .55		[-3.4 / 4.3] .93	.67	[1.1 / 2.7] .98
	.91	.75		.66	.93	
1.00	.94	.81	.65	.92	.92	.99
	.87	.97	.52	.98	.94	
.99	1.03	1.00	.60	1.03	1.01	1.02

NUMBERS IN TABLE ARE PRESSURE COEFFICIENTS $C_p = \dfrac{P_T - P_S}{q}$

NUMBERS IN BOXES INDICATE FLOW DIRECTION IN DEGREES.
UPPER = VERTICAL DISPLACEMENT, POSITIVE FOR UPWASH
LOWER = HORIZONTAL DISPLACEMENT, POSITIVE FOR FLOW FROM LEFT TO RIGHT LOOKING AFT.

SURVEY PLANE

← 7.475 IN →

RAKE MOUNTING POINT

NOTE- TABLE IS SEEN FROM THE FLOW MODEL NOSE, LOOKING AFT.

ROTOR PERFORMANCE AND OPERATING CONDITION DATA TABLES

TABLE XI. WIND TUNNEL OPERATING CONDITIONS AND SHAFT FORCE AND
MOMENT COEFFICIENT-SOLIDITY RATIOS AT THREE FORWARD
SPEEDS AND VARIOUS FUSELAGE ATTITUDES, CONFIGURATION FH

RUN	PT	CONF	V FT/SEC	q LB/FT²	θ₁ DEG	ψ DEG	μ	α_c DEG	q_c DEG	θ_s DEG	a_s DEG	A₁s DEG	B₁s DEG	C_L/σ	C_Q/σ	C_Y/σ	C_θ/σ	C_pm/σ	C_mm/σ
87- 7		FH	103.0	11.9	0.	0.	.295	.0	.0	.0	.0	-.0	-.0	.0010	.00165	.00007	.00004	-.00000	-.00001
87- 8		FH	103.0	11.9	-8.	0.	.292	-8.0	.0	.0	.0	-.0	-.0	.0030	.00153	.00044	-.00000	-.00004	-.00017
87- 9		FH	103.0	11.9	-4.	0.	.294	-4.0	.0	.0	.0	-.0	-.0	.0009	.00169	.00024	-.00003	-.00004	-.00009
87-10		FH	103.0	11.9	4.	0.	.294	8.0	.0	.0	.0	-.0	-.0	.0010	.00177	.00010	-.00006	-.00005	-.00004
87-11		FH	103.0	11.9	-8.	4.	.292	-8.0	.0	.0	.0	-.0	-.0	.0015	.00181	-.00017	.00000	-.00005	-.00007
87-12		FH	103.0	11.9	-4.	4.	.292	-8.0	.0	.0	.0	-.0	-.0	.0029	.00151	.00063	.00003	.00019	-.00031
87-13		FH	103.0	11.9	4.	4.	.294	-4.0	.0	.0	.0	-.0	-.0	.0017	.00182	.00043	.00010	-.00012	-.00022
87-14		FH	103.0	11.9	-4.	-4.	.294	-8.0	.0	.0	.0	-.0	-.0	.0010	.00169	.00010	.00000	-.00009	-.00011
87-15		FH	103.0	11.9	-8.	-4.	.292	-4.0	.0	.0	.0	-.0	-.0	.0013	.00173	.00028	.00006	-.00006	-.00004
87-16		FH	103.0	11.9	-4.	4.	.294	.0	.0	.0	.0	-.0	-.0	.0009	.00185	.00008	.00002	-.00002	-.00003
87-17		FH	103.0	11.9	4.	4.	.294	.0	.0	.0	.0	-.0	-.0	.0010	.00185	.00033	.00005	-.00003	-.00010
87-18		FH	103.0	11.9	8.	8.	.295	.0	.0	.0	.0	-.0	-.0	.0007	.00187	.00008	.00004	-.00000	-.00026
87-19		FH	103.0	11.9	-4.	-4.	.295	.0	.0	.0	.0	-.0	-.0	.0007	.00184	.00010	.00005	-.00001	-.00010
87-20		FH	103.0	11.9	8.	-8.	.295	.0	.0	.0	.0	-.0	-.0	.0008	.00183	-.00017	.00004	-.00001	-.00012
87-21		FH	103.0	11.9			.295	.0	.0	.0	.0	-.0	-.0	.0008	.00184	-.00032	.00005	-.00001	-.00025
87-22		FH	170.2	32.3	0.	0.	.504	.0	.0	.0	.0	-.0	-.0	.0019	.00544	.00004	.00007	-.00000	-.00001
87-23		FH	170.2	32.3	-8.	0.	.499	-8.0	.0	.0	.0	-.0	-.0	.0023	.00517	.00021	.00002	-.00004	-.00007
87-24		FH	170.2	32.3	-4.	0.	.503	-4.0	.0	.0	.0	-.0	-.0	.0019	.00530	.00023	.00009	-.00002	-.00007
87-25		FH	170.2	32.3	0.	0.	.503	4.0	.0	.0	.0	-.0	-.0	.0018	.01117	.00011	.00009	.00216	-.00015
87-26		FH	170.2	32.3	0.	4.	.499	8.0	.0	.0	.0	-.0	-.0	.0028	.00560	.00036	.00010	-.00008	-.00049
87-27		FH	170.2	32.3	4.	4.	.503	-8.0	.0	.0	.0	-.0	-.0	.0016	.01589	.00082	.00001	.00947	-.00033
87-28		FH	170.2	32.3	4.	-4.	.503	4.0	.0	.0	.0	-.0	-.0	.0021	.00527	.00037	.00009	-.00013	-.00050
87-29		FH	170.2	32.3	4.	-4.	.503	4.0	.0	.0	.0	-.0	-.0	.0023	.00537	-.00075	.00000	-.00009	-.00043
87-30		FH	170.2	32.3	-8.	8.	.503	-4.0	.0	.0	.0	-.0	-.0	.0020	.00848	-.00054	.00008	-.00522	-.00079
87-31		FH	170.2	32.3	8.	8.	.504	.0	.0	.0	.0	-.0	-.0	.0019	.00547	.00113	.00007	-.00009	-.00035
87-32		FH	170.2	32.3	-4.	-4.	.504	.0	.0	.0	.0	-.0	-.0	.0019	.00527	-.00046	.00006	-.00008	-.00046
87-33		FH	170.2	32.3	4.	4.	.504	.0	.0	.0	.0	-.0	-.0	.0021	.00534	-.00066	.00005	-.00004	-.00083
87-34		FH	170.2	32.3	-8.	-8.	.504	.0	.0	.0	.0	-.0	-.0	.0021	.00540	-.00111	.00005	-.00005	-.00011
87-35		FH	255.8	72.0	0.	0.	1.026	.0	.0	.0	.0	-.0	-.0	.0079	.02243	.00020	.00014	-.00010	-.00011
87-36		FH	255.8	72.0	-4.	2.	1.024	-4.0	.0	.0	.0	-.0	-.0	.0074	.02243	.00068	.00011	.00024	-.00031
87-37		FH	255.8	72.0	-2.	2.	1.026	-2.0	.0	.0	.0	-.0	-.0	.0077	.02203	.00050	.00018	-.00008	-.00024
87-38		FH	255.8	72.0	0.	0.	1.026	2.0	.0	.0	.0	-.0	-.0	.0103	.02302	.00017	.00018	-.00004	-.00010
87-39		FH	255.8	72.0	2.	2.	1.024	4.0	.0	.0	.0	-.0	-.0	.0092	.02298	.00000	.00020	-.00025	-.00005
87-40		FH	255.8	72.0	2.	2.	1.026	-2.0	.0	.0	.0	-.0	-.0	.0310	.02238	.00982	.00155	.00195	-.00420
87-41		FH	255.8	72.0	2.	2.	1.026	4.0	.0	.0	.0	-.0	-1.0	.0042	.02284	.00139	-.00013	-.00013	-.00099
87-42		FH	255.8	72.0	4.	2.	1.024	2.0	.0	.0	.0	-.0	-.0	.0089	.02302	.00123	-.00021	-.00020	-.00094
87-43		FH	255.8	72.0	2.	-2.	1.026	.0	.0	.0	.0	-.0	-.0	.0068	.02311	.00097	.00019	.00003	-.00070
87-44		FH	255.8	72.0	0.	2.	1.026	.0	.0	.0	.0	-.0	-.0	.0042	.02310	.00264	.00018	.00012	-.00184
87-45		FH	255.8	72.0	0.	-2.	1.026	.0	.0	.0	.0	-.0	-.0	.0085	.02281	.00153	.00019	.00007	-.00104
87-46		FH	255.8	72.0	0.	-2.	1.026	.0	.0	.0	.0	-.0	-.0	.0085	.02271	-.00083	.00016	.00005	-.00066
87-47		FH	255.8	72.0	0.	-4.	1.026	.0	.0	.0	.0	-.0	-.0	.0089	.02317	.00166	.00019	.00023	-.00018

TABLE XII. WIND TUNNEL OPERATING CONDITIONS AND SHAFT FORCE AND
MOMENT COEFFICIENT-SOLIDITY RATIOS AT THREE FORWARD
SPEEDS AND VARIOUS FUSELAGE ATTITUDES, CONFIGURATION FHC

RUN PT	CONF	V FT/SEC	q LB/FT²	q_f DEG	ϕ DEG	μ	a_c DEG	q_t DEG	a_{1s} DEG	b_{1s} DEG	A_{1s} DEG	B_{1s} DEG	C_L/σ	C_D/σ	C_Y/σ	C_Q/σ	C_{PM}/σ	C_{RM}/σ
88-5	FHC	103.0	12.0	0.	0.	.295		.0	.0	.0	-.0	-.0	.0035	.00203	.00121	-.00004	-.00006	-.00043
88-6	FHC	103.0	12.0	-8.	0.	.292	-8.0	.0	.0	.0	-.0	-.0	.0036	.00161	.00024	-.00000	-.00012	-.00006
88-7	FHC	103.0	12.0	-4.	0.	.294	-4.0	.0	.0	.0	-.0	-.0	.0032	.00194	.00021	-.00001	-.00011	-.00003
88-8	FHC	103.0	12.0	8.	0.	.294	8.0	.0	.0	.0	-.0	-.0	.0034	.00211	-.00012	-.00006	-.00006	-.00008
88-9	FHC	103.0	12.0	0.	0.	.292	8.0	.0	.0	.0	-.0	-.0	.0035	.00218	-.00044	.00006	-.00004	-.00021
88-10	FHC	103.0	12.0	4.	4.	.294	4.0	.0	.0	.0	-.0	-.0	.0031	.00219	.00015	-.00006	-.00009	-.00009
88-11	FHC	103.0	12.0	-4.	4.	.294	-4.0	.0	.0	.0	-.0	-.0	.0032	.00198	.00041	.00003	-.00007	-.00020
88-12	FHC	103.0	12.0	-8.	4.	.292	-8.0	.0	.0	.0	-.0	-.0	.0030	.00165	.00049	-.00001	-.00005	-.00023
88-13	FHC	103.0	12.0	-8.	-4.	.292	-8.0	.0	.0	.0	-.0	-.0	.0030	.00168	.00015	-.00000	-.00011	-.00007
88-14	FHC	103.0	12.0	-4.	-4.	.294	4.0	.0	.0	.0	-.0	-.0	.0026	.00190	-.00022	.00002	-.00007	-.00020
88-15	FHC	103.0	12.0	4.	-4.	.294	.0	.0	.0	.0	-.0	-.0	.0030	.00210	-.00049	.00005	-.00002	-.00030
88-16	FHC	103.0	12.0	0.	8.	.295	.0	.0	.0	.0	-.0	-.0	.0028	.00222	.00032	.00004	-.00009	-.00023
88-17	FHC	103.0	12.0	0.	0.	.295	.0	.0	.0	.0	-.0	-.0	.0027	.00219	.00031	.00001	-.00008	-.00011
88-18	FHC	103.0	12.0	0.	-4.	.295	.0	.0	.0	.0	-.0	-.0	.0028	.00220	.00018	.00003	-.00008	-.00024
88-19	FHC	170.2	32.4	0.	-8.	.504	-8.0	.0	.0	.0	-.0	-.0	.0056	.00557	-.00031	-.00005	-.00000	-.00039
88-20	FHC	170.2	32.4	-8.	0.	.504	-4.0	.0	.0	.0	-.0	-.0	.0054	.00562	-.00073	-.00001	-.00012	-.00016
88-21	FHC	170.2	32.4	-4.	0.	.499	8.0	.0	.0	.0	-.0	-.0	.0053	.00598	.00012	.00001	-.00013	-.00000
88-22	FHC	170.2	32.4	4.	0.	.503	4.0	.0	.0	.0	-.0	-.0	.0059	.00616	.00031	.00006	-.00010	-.00020
88-23	FHC	170.2	32.4	8.	0.	.503	-4.0	.0	.0	.0	-.0	-.0	.0061	.00617	.00028	.00007	-.00003	-.00029
88-24	FHC	170.2	32.4	4.	4.	.499	4.0	.0	.0	.0	-.0	-.0	.0050	.00587	.00071	.00002	-.00005	-.00024
88-25	FHC	170.2	32.4	-4.	4.	.503	-4.0	.0	.0	.0	-.0	-.0	.0056	.00591	-.00048	.00002	-.00001	-.00046
88-26	FHC	170.2	32.4	-4.	-4.	.503	-4.0	.0	.0	.0	-.0	-.0	.0051	.00591	.00099	-.00005	-.00010	-.00046
88-27	FHC	170.2	32.4	4.	-4.	.503	4.0	.0	.0	.0	-.0	-.0	.0050	.00610	-.00105	-.00005	-.00006	-.00067
88-28	FHC	170.2	32.4	4.	8.	.504	4.0	.0	.0	.0	-.0	-.0	.0058	.00619	.00047	-.00006	-.00004	-.00047
88-29	FHC	170.2	32.4	0.	0.	.504	.0	.0	.0	.0	-.0	-.0	.0051	.00612	-.00080	.00004	-.00004	-.00033
88-30	FHC	170.2	32.4	4.	4.	.504	.0	.0	.0	.0	-.0	-.0	.0050	.00601	-.00139	-.00003	-.00004	-.00060
88-31	FHC	170.2	32.4	0.	0.	.504	.0	.0	.0	.0	-.0	-.0	.0053	.00609	-.00004	-.00003	-.00003	-.00104
88-32	FHC	170.2	32.4	0.	0.	.504	.0	.0	.0	.0	-.0	-.0	.0054	.00529	-.00036	-.00008	-.00032	-.00011
88-33	FHC	255.8	72.4	0.	0.	1.026	.0	.0	.0	.0	-.0	-.0	.0205	.02516	-.00025	-.00008	-.00011	-.00007
88-34	FHC	255.8	72.4	-4.	-4.	1.024	-4.0	.0	.0	.0	-.0	-.0	.0192	.02550	-.00023	-.00011	-.00007	-.00001
88-35	FHC	255.8	72.4	-2.	0.	1.026	-2.0	.0	.0	.0	-.0	-.0	.0197	.02533	.00056	.00014	-.00006	-.00021
88-36	FHC	255.8	72.4	0.	0.	1.026	4.0	.0	.0	.0	-.0	-.0	.0230	.02568	.00079	.00016	-.00039	-.00033
88-37	FHC	255.8	72.4	2.	0.	1.024	4.0	.0	.0	.0	-.0	-.0	.0210	.02572	.00065	.00015	-.00045	-.00064
88-38	FHC	255.8	72.4	4.	2.	1.024	.0	.0	.0	.0	-.0	-.0	.0209	.02563	.00137	-.00015	-.00032	-.00066
88-39	FHC	255.8	72.4	-2.	2.	1.026	-4.0	.0	.0	.0	-.0	-.0	.0208	.02539	-.00253	-.00018	-.00036	-.00065
88-40	FHC	255.8	72.4	2.	-2.	1.026	2.0	.0	.0	.0	-.0	-.0	.0196	.02540	.00144	.00014	-.00021	-.00109
88-41	FHC	255.8	72.4	-2.	0.	1.026	-2.0	.0	.0	.0	-.0	-.0	.0204	.02582	-.00253	.00018	-.00036	-.00177
88-42	FHC	255.8	72.4	0.	4.	1.026	.0	.0	.0	.0	-.0	-.0	.0195	.02534	.00128	.00017	-.00036	-.00086
88-43	FHC	255.8	72.4	0.	0.	1.026	.0	.0	.0	.0	-.0	-.0	.0194	.02545	-.00120	.00002	-.00062	-.00100
88-44	FHC	255.8	72.4	0.	-2.	1.026	.0	.0	.0	.0	-.0	-.0	.0194	.02545	-.00120	.00015	-.00064	-.00100
88-45	FHC	255.8	72.4	0.	-4.	1.026	.0	.0	.0	.0	-.0	-.0	.0194	.02560	-.00231	.00017	-.00022	-.00364

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TABLE XIII. WIND TUNNEL OPERATING CONDITIONS AND SHAFT FORCE AND
MOMENT COEFFICIENT-SOLIDITY RATIOS AT THREE FORWARD
SPEEDS AND VARIOUS FUSELAGE ATTITUDES, CONFIGURATIONS FHf

RUN	P f	CONF	V FT/SEC	q LB/FT	θ_i DEG	ϕ DEG	μ	α_c DEG	θ_c DEG	a_{1s} DEG	b_{1s} DEG	A_{1s} DEG	B_{1s} DEG	C_L/σ	C_D/σ	C_Y/σ	C_ℓ/σ	C_{me}/σ	C_{mo}/σ
89-7		FHf	103.0	11.9	0.	0.	.295	0.0	.0	0.0	0.0	-.0	-.0	.0034	.00097	-.00020	.00018	-.00033	-.00008
89-8		FHf	103.0	11.9	-8.	0.	.292	-8.0	.0	0.0	0.0	-.0	-.0	.0020	.00050	-.00023	.00013	-.00002	-.00009
89-9		FHf	103.0	11.9	-4.	0.	.294	-4.0	.0	0.0	0.0	-.0	-.0	.0034	.00074	.00022	.00015	-.00015	-.00008
89-10		FHf	103.0	11.9	4.	0.	.294	8.0	.0	0.0	0.0	-.0	-.0	.0038	.00121	-.00017	.00018	-.00043	-.00008
89-11		FHf	103.0	11.9	8.	4.	.292	4.0	.0	0.0	0.0	-.0	-.0	.0035	.00134	-.00034	.00017	-.00051	-.00020
89-12		FHf	103.0	11.9	4.	4.	.294	4.0	.0	0.0	0.0	-.0	-.0	.0036	.00122	-.00002	.00018	-.00042	-.00000
89-13		FHf	103.0	11.9	-4.	-4.	.294	-4.0	.0	0.0	0.0	-.0	-.0	.0029	.00067	.00033	.00014	-.00022	-.00018
89-14		FHf	103.0	11.9	-8.	-4.	.292	-8.0	.0	0.0	0.0	-.0	-.0	.0019	.00061	.00056	.00012	-.00001	-.00029
89-15		FHf	103.0	11.9	-8.	-4.	.292	-8.0	.0	0.0	0.0	-.0	-.0	.0024	.00036	.00016	.00014	-.00001	-.00001
89-16		FHf	103.0	11.9	-4.	-4.	.294	-4.0	.0	0.0	0.0	-.0	-.0	.0032	.00044	-.00001	.00016	-.00031	-.00006
89-17		FHf	103.0	11.9	-4.	8.	.294	-4.0	.0	0.0	0.0	-.0	-.0	.0041	.00100	-.00004	.00014	-.00056	-.00005
89-18		FHf	103.0	11.9	0.	4.	.295	.0	.0	0.0	0.0	-.0	-.0	.0035	.00081	.00023	.00014	-.00042	-.00015
89-19		FHf	103.0	11.9	0.	-4.	.295	.0	.0	0.0	0.0	-.0	-.0	.0036	.00075	.00003	.00013	-.00042	-.00005
89-20		FHf	103.0	11.9	0.	-8.	.295	.1	.0	0.0	0.0	-.0	-.0	.0038	.00071	-.00016	.00018	-.00043	-.00012
89-21		FHf	103.0	11.9	0.		.295	.1	.0	0.0	0.0	-.0	-.0	.0276	.00178	-.00032	.00015	-.00468	-.00027
89-22		FHf	103.0	11.9	0.		.295	.0	.0	0.0	0.0	-.0	-.0	.0278	.00098	-.00004	.00017	-.00473	-.00004
89-23		FHf	170.2	32.4	-8.	-8.	.500	-8.0	.0	0.0	0.0	-.0	-.0	.0113	.00431	.00018	.00020	-.00087	-.00015
89-24		FHf	170.2	32.4	4.	4.	.503	4.0	.0	0.0	0.0	-.0	-.0	.0086	.00347	.00066	.00021	-.00019	-.00033
89-25		FHf	170.2	32.4	8.	8.	.503	8.0	.0	0.0	0.0	-.0	-.0	.0101	.00380	.00035	.00017	-.00058	-.00020
89-26		FHf	170.2	32.4	-4.	-4.	.503	-4.0	.0	0.0	0.0	-.0	-.0	.0121	.00450	.00007	.00016	-.00113	-.00009
89-27		FHf	170.2	32.4	-4.	-4.	.499	-4.0	.0	0.0	0.0	-.0	-.0	.0125	.00487	-.00004	.00020	-.00134	-.00000
89-28		FHf	170.2	32.4	8.	8.	.503	8.0	.0	0.0	0.0	-.0	-.0	.0117	.00434	-.00046	.00019	-.00119	-.00033
89-29		FHf	170.2	32.4	-4.	-4.	.503	-4.0	.0	0.0	0.0	-.0	-.0	.0097	.00394	-.00098	.00017	-.00060	-.00065
89-30		FHf	170.2	32.4	-4.	-4.	.503	-4.0	.0	0.0	0.0	-.0	-.0	.0103	.00350	-.00005	.00020	-.00063	-.00009
89-31		FHf	170.2	32.4	-8.	-8.	.503	-8.0	.0	0.0	0.0	-.0	-.0	.0124	.00413	-.00010	.00019	-.00122	-.00009
89-32		FHf	170.2	32.4	0.	0.	.504	.0	.0	0.0	0.0	-.0	-.0	.0107	.00390	.00115	.00019	-.00094	-.00084
89-33		FHf	170.2	32.4	0.	0.	.504	.0	.0	0.0	0.0	-.0	-.0	.0111	.00410	.00072	.00019	-.00088	-.00052
89-34		FHf	170.2	32.4	0.	0.	.504	.0	.0	0.0	0.0	-.0	-.0	.0119	.02020	.00000	.00019	-.00541	-.00003
89-35		FHf	170.2	32.4	4.	4.	.504	4.0	.0	0.0	0.0	-.0	-.0	.0120	.02168	-.00042	.00021	-.00606	-.00039
89-36		FHf	170.2	32.4	0.	0.	.504	.0	.0	0.0	0.0	-.0	-.0	.0125	.02073	.00025	.00021	-.00541	-.00012
89-37		FHf	213.7	50.8	0.	0.	1.014	.0	.0	0.0	0.0	-.0	-.0	.0477	.01832	.00184	.00049	-.00329	-.00121
89-38		FHf	213.7	50.8	4.	4.	1.012	4.0	.0	0.0	0.0	-.0	-.0	.0516	.01997	.00132	.00053	-.00424	-.00089
89-39		FHf	213.7	50.8	0.	4.	1.012	4.0	.0	0.0	0.0	-.0	-.0	.0502	.01925	.00250	.00053	-.00447	-.00193
89-40		FHf	213.7	50.8	0.	0.	1.014	.0	.0	0.0	0.0	-.0	-.0	.0475	.01808	.00364	.00050	-.00330	-.00258
89-41		FHf	213.7	50.8	0.	2.	1.014	.0	.0	0.0	0.0	-.0	-.0	.0480	.01853	.00270	.00047	-.00313	-.00184
89-42		FHf	213.7	50.8	0.	2.	1.012	4.0	.0	0.0	0.0	-.0	-.0	.0523	.01927	.00219	.00055	-.00452	-.00152
89-43		FHf	213.7	50.8	4.	-2.	1.014	.0	.0	0.0	0.0	-.0	-.0	.0482	.01770	.00103	.00045	-.00340	-.00059
89-44		FHf	213.7	50.8	0.	-2.	1.012	4.0	.0	0.0	0.0	-.0	-.0	.0489	.01823	.00088	.00050	-.00503	-.00053
89-45		FHf	213.7	50.8	0.	0.	1.014	.0	.0	0.0	0.0	-.0	-.0	.0505	.01852	.00147	.00042	-.00360	-.00101

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TABLE XIV. WIND TUNNEL OPERATING CONDITIONS AND SHAFT FORCE AND
MOMENT COEFFICIENT-SOLIDITY RATIOS AT THREE FORWARD
SPEEDS AND VARIOUS FUSELAGE ATTITUDES AND ROTOR
OPERATING CONDITIONS, CONFIGURATION FHB

RUN-PT	CONF	V FT/SEC	q LB/FT²	θf DEG	φ DEG	μ	αc DEG	αL DEG	αB DEG	θB DEG	A1B DEG	B1B DEG	cL/σ	cD/σ	cY/σ	cQ/σ	cPM/σ	cRM/σ
61-5	FHB	103.0	11.9	0	0	.295	-7.5	8.0	-4.0	.0	-7.7	7.7	.0507	-.00268	-.00099	.00349	-.00397	.00104
61-6	FHB	103.0	11.9	-8	0	.292	-9.3	12.0	4.0	.0	2.5	1.7	.0828	-.00391	-.00103	.00523	-.00438	.00066
61-7	FHB	103.0	11.9	-8	0	.292	-11.9	10.0	.0	.0	-2.0	4.1	.0538	-.00607	-.00209	.00447	-.00014	-.00026
61-8	FHB	103.0	11.9	-4	0	.294	-7.4	8.0	.0	.0	-2.0	3.7	.0532	-.00234	-.00005	.00330	-.00014	-.00050
61-9	FHB	103.0	11.9	8	0	.294	.3	4.0	.0	.0	-2.9	4.1	.0822	-.00697	-.00155	.00202	-.00003	-.00174
61-10	FHB	103.0	11.9	0	8	.291	5.8	4.0	.0	.0	-1.8	2.6	.0666	.01114	-.00111	.00022	.00013	.00018
61-11	FHB	103.0	11.9	-8	4	.294	-6.8	12.0	-4.0	.0	-8.1	7.1	.0516	-.00233	-.00070	.00347	-.00427	.00075
61-12	FHB	103.0	11.9	-8	4	.292	-8.8	10.0	4.0	.0	2.0	1.2	.0836	-.00355	-.00111	.00523	-.00013	-.00063
61-13	FHB	103.0	11.9	4	0	.292	-11.6	8.0	.0	.0	-2.4	3.9	.0541	-.00593	-.00225	.00446	-.00006	-.00040
61-14	FHB	103.0	11.9	4	8	.292	-7.0	8.0	.0	.0	-2.3	3.3	.0536	-.00217	-.00017	.00329	-.00013	-.00041
61-15	FHB	103.0	11.9	-4	-4	.294	.5	8.0	.0	.0	-3.2	3.9	.0822	-.00712	-.00126	.00205	-.00003	-.00143
61-16	FHB	103.0	11.9	4	-4	.294	-1.1	8.0	.0	.0	-2.4	4.5	.0824	-.00695	-.00170	.00197	-.00005	-.00177
61-17	FHB	103.0	11.9	-4	-4	.294	-7.6	10.0	.0	.0	-1.8	3.8	.0535	-.00222	-.00049	.00329	-.00008	-.00089
61-18	FHB	103.0	11.9	-8	-4	.292	-12.3	12.0	.0	.0	-1.9	4.6	.0538	-.00628	-.00169	.00445	-.00011	-.00003
61-19	FHB	103.0	11.9	-4	-8	.292	-9.5	8.0	4.0	.0	2.9	1.9	.0836	-.00411	-.00070	.00527	-.00418	.00100
61-20	FHB	103.0	11.9	0	0	.294	-8.0	6.0	-4.0	.0	-7.1	8.3	.0521	-.00258	-.00168	.00350	-.00419	.00138
62-5	FHB	170.2	32.2	4	0	.503	-9.2	8.0	.0	.0	-2.3	5.3	.0299	-.00062	-.00065	.00459	-.00003	.00062
62-6	FHB	170.2	32.2	8	4	.504	-7.6	10.0	.0	.0	-3.4	7.7	.0612	-.00169	-.00304	.00105	-.00014	.00247
62-7	FHB	170.2	32.2	0	4	.503	-.2	4.0	.0	.0	-2.2	4.2	.0471	-.00551	-.00167	.00003	-.00001	.00145
62-8	FHB	170.2	32.2	4	-4	.499	3.2	4.0	.0	.0	-2.2	4.9	.0299	.01079	-.00299	.00327	-.00003	.00258
62-9	FHB	170.2	32.2	8	4	.503	-9.0	8.0	4.0	.0	-2.5	5.0	.0299	-.00073	-.00014	.00619	-.00006	.00001
62-10	FHB	170.2	32.2	4	-4	.504	-8.6	12.0	.0	.0	-4.9	8.8	.0701	-.00077	-.00308	.00453	-.00009	.00262
62-11	FHB	170.2	32.2	0	0	.504	-7.3	10.0	.0	.0	-4.1	7.4	.0600	-.00147	-.00222	.00179	-.00009	.00184
62-12	FHB	170.2	32.2	4	0	.504	-3.0	8.0	.0	.0	-1.8	3.0	.0270	-.00267	-.00009	.00334	-.00018	.00002
62-13	FHB	170.2	32.2	4	-4	.503	-6.1	8.0	4.0	.0	-8.8	10.2	.0444	-.00165	-.00103	.00076	-.00421	.00084
62-14	FHB	170.2	32.2	0	4	.503	2.9	.0	.0	.0	-1.5	1.1	.0235	-.00433	-.00001	.00101	-.00001	-.00003
62-15	FHB	170.2	32.2	0	4	.503	-.1	4.0	.0	.0	-2.5	4.0	.0473	-.00557	-.00087	.00322	-.00021	.00071
62-16	FHB	170.2	32.2	4	-4	.504	-9.7	8.0	4.0	.0	-1.6	5.7	.0296	-.00067	-.00132	.00605	-.00022	.00104
62-17	FHB	170.2	32.2	4	-4	.504	-9.8	12.0	.0	.0	-3.3	9.9	.0706	-.00084	-.00386	.00445	-.00004	.00307
62-18	FHB	170.2	32.2	0	0	.504	-8.1	10.0	.0	.0	-2.6	8.2	.0602	-.00157	-.00324	.00181	-.00002	.00261
62-19	FHB	170.2	32.2	0	0	.504	-3.7	4.0	.0	.0	-1.2	3.7	.0274	-.00260	-.00139	.00321	-.00002	.00110
62-20	FHB	170.2	32.2	4	-4	.503	-6.6	8.0	4.0	.0	-7.7	10.7	.0462	-.00163	-.00255	.00100	-.00405	.00208
62-21	FHB	170.2	32.2	4	-4	.503	-6.6	4.0	.0	.0	-1.6	4.6	.0473	-.00540	-.00227	.00082	-.00007	.00179
62-22	FHB	170.2	32.2	0	0	.503	2.3	.0	4.0	.0	-1.0	4.6	.0231	-.00407	-.00140	.00163	-.00013	.00098
41-5	FHB	213.2	49.8	0	0	1.012	-1.8	4.0	4.0	.0	1.8	1.9	.0422	-.00572	-.00291	.00218	-.00501	.00331
41-6	FHB	213.2	49.8	0	0	1.012	-4.6	4.0	.0	.0	-2.2	4.6	.0014	-.00464	.00019	.00221	-.00032	.00034
41-7	FHB	213.2	49.8	0	0	1.012	-.0	4.0	.0	.0	-1.2	-.0	-.0057	-.00304	-.00066	.00239	-.00080	.00029
41-8	FHB	213.2	49.8	0	0	1.010	-4.1	4.0	4.0	.0	-7.6	8.1	.0320	-.00065	-.00092	.00217	-.00230	.00040
41-9	FHB	213.2	49.8	4	4	1.010	-1.6	4.0	.0	.0	-3.6	5.6	-.0046	-.00490	-.00308	.00249	-.00023	.00256
41-10	FHB	213.2	49.8	0	0	1.010	-3.5	4.0	.0	.0	-8.3	7.5	-.0046	-.00373	.00224	-.00249	-.00394	-.00176
41-11	FHB	213.2	49.8	0	2	1.012	-4.1	4.0	.0	.0	-2.5	4.1	.0026	-.00449	.00150	.00224	-.00019	-.00079

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TABLE XIV – Concluded

RUN	CONF	V FT/SEC	q LB/FT²	α_f DEG	φ DEG	M	α_c DEG	θ_c DEG	θ_ib DEG	ψ_ib DEG	A_ib DEG	B_ib DEG	C_L/e	C_D/e	C_Y/e	C_q/e	C_{PM}/e	C_{RM}/e
41-12	FHb	213.2	49.8	0.	2.	1.012	-1.3	4.0	4.0	.0	1.4	1.3	.0453	.00610	-.00182	.00190	-.00508	.00239
41-13	FHb	213.2	49.8	-0.	2.	1.012	-7.1	4.0	-4.0	.0	-6.4	7.1	-.0352	.00555	-.05116	-.00834	-.00415	.01873
41-14	FHb	213.2	49.8	0.	2.	1.012	.1	.0	.0	.0	-1.4	-.1	-.0044	.00419	-.00241	.00224	-.00047	-.00116
41-15	FHb	213.2	49.8	4.	2.	1.010	-4.0	4.0	-4.0	.0	-8.0	8.0	-.0060	.00420	.00093	.00244	.00435	-.00099
41-16	FHb	213.2	49.8	4.	2.	1.010	-1.0	4.0	.0	.0	-4.1	5.0	.0340	.00515	-.00177	.00219	-.00021	.00167
41-17	FHb	213.2	49.8	4.	2.	1.010	.7	.0	-4.0	.0	-7.0	3.3	-.0025	.00334	-.00136	.00240	-.00388	-.00105
41-18	FHb	213.2	49.8	0.	-2.	1.012	-2.0	4.0	4.0	.0	2.2	2.0	.0430	.00629	-.00441	.00179	-.00471	-.00414
41-19	FHb	213.2	49.8	0.	-2.	1.010	-4.7	4.0	.0	.0	-1.7	4.7	.0019	.00553	-.00122	.00217	-.00013	.00112
41-20	FHb	213.2	49.8	4.	-2.	1.010	-4.5	4.0	-4.0	.0	-7.2	8.5	-.0067	.00497	-.00190	.00235	.00459	.00092
41-21	FHb	213.2	49.8	4.	-2.	1.010	-1.8	4.0	.0	.0	-3.3	5.8	.0320	.00567	-.00414	.00207	-.00016	.00333
41-22	FHb	213.2	49.8	0.	0.	1.012	-4.4	4.0	.0	.0	-2.2	4.4	.0017	.00537	.00036	.00218	.00035	-.00002

TABLE XV. WIND TUNNEL OPERATING CONDITIONS AND SHAFT FORCE AND
MOMENT COEFFICIENT-SOLIDITY RATIOS AT THREE FORWARD
SPEEDS AND VARIOUS FUSELAGE ATTITUDES AND ROTOR
OPERATING CONDITIONS, CONFIGURATION FHBf

RUN	CONF	V FT/SEC	q LB/FT²	θᵣ DEG	Ψ DEG	μ	αc DEG	θc DEG	θs DEG	bₛ DEG	Aₛ DEG	Bₛ DEG	C_L/σ	C_D/σ	C_Y/σ	C_Q/σ	C_PM/σ	C_RM/σ
29-5	FHBf	103.0	11.8	0.	0.	.205	-7.1	8.0	-4.0	.0	-7.4	7.3	.0488	-.00223	-.00040	.00360	-.00339	.00041
29-6	FHBf	103.0	11.8	-8.	0.	.202	-9.1	12.0	.0	.0	2.0	1.5	.0818	-.00041	-.0175	.00573	-.00257	.00229
29-7	FHBf	103.0	11.8	-8.	0.	.202	-11.6	10.0	.0	.0	2.2	3.9	.0517	-.00728	-.00024	.00465	-.00050	.00069
29-8	FHBf	103.0	11.8	-4.	0.	.204	-7.2	8.0	.0	.0	2.1	3.5	.0506	-.00276	-.00049	.00351	-.00051	.00081
29-9	FHBf	103.0	11.8	-4.	0.	.201	.3	8.0	.0	.0	3.1	4.1	.0800	.00654	-.00205	.00227	-.00057	.00195
29-10	FHBf	103.0	11.8	8.	0.	.201	-6.0	4.0	-4.0	.0	2.3	2.3	.0665	.01073	-.01216	-.00163	-.00077	.00543
29-11	FHBf	103.0	11.8	0.	0.	.205	-6.6	8.0	.0	.0	-8.1	6.8	.0484	-.00199	-.0001	.00360	-.00352	.00015
29-12	FHBf	103.0	11.8	-8.	4.	.202	-8.8	12.0	.0	.0	1.6	1.2	.0806	-.00570	-.0001	.00577	-.00452	.00201
29-13	FHBf	103.0	11.8	-8.	4.	.202	-11.4	10.0	.0	.0	-2.6	3.6	.0514	-.00653	-.0103	.00489	-.00056	.00016
29-14	FHBf	103.0	11.8	-4.	4.	.204	-7.0	8.0	.0	.0	2.5	3.2	.0503	-.00230	-.00005	.00348	-.00052	.00048
29-15	FHBf	103.0	11.8	-4.	-4.	.204	.6	8.0	.0	.0	3.4	3.8	.0798	.00690	-.0574	.00156	-.00064	.00314
29-16	FHBf	103.0	11.8	-4.	-4.	.204	-.1	8.0	.0	.0	2.8	4.3	.0782	.00676	-.0125	.00221	-.00070	.00146
29-17	FHBf	103.0	11.8	-8.	-8.	.205	-7.5	8.0	.0	.0	2.0	3.8	.0503	-.00258	.00054	.00348	-.00047	.00009
29-18	FHBf	103.0	11.8	-0.	0.	.205	-.0	.0	-4.0	.0	-.0	-.0	.0024	.00137	-.00037	.00144	-.00030	.00037
30-6	FHBf	103.0	11.8	-0.	0.	.204	-7.6	8.0	.0	.0	2.0	3.8	.0504	-.00326	-.00070	.00344	-.00060	.00060
30-7	FHBf	103.0	11.8	-4.	-4.	.202	-12.2	10.0	.0	.0	2.0	4.4	.0495	-.00763	-.0051	.00478	-.00074	.00054
30-8	FHBf	103.0	11.8	-8.	-8.	.202	-9.7	12.8	.0	.0	2.5	2.1	.0786	-.00689	-.0218	.00566	-.00507	.00223
30-9	FHBf	103.0	11.8	0.	-8.	.205	-7.8	8.0	4.0	.0	-7.1	8.1	.0488	-.00337	.00065	.00361	-.00330	.00023
30-10	FHBf	103.0	11.8	-0.	0.	.205	-.1	.0	.0	.0	-.6	-.1	.0035	.00068	-.00009	.00145	-.00071	.00020
30-11	FHBf	103.0	11.8	-0.	0.	.205	-.0	.0	.0	.0	-.6	-.1	.0034	-.00212	-.00005	.00139	-.00042	.0002
31-5	FHBf	170.2	32.1	0.	0.	.503	-9.3	8.0	.0	.0	2.2	5.3	.0336	.00037	-.00030	.00330	-.00062	.00014
31-6	FHBf	170.2	32.1	0.	0.	.504	-7.8	10.0	.0	.0	3.7	7.9	.0575	.00104	-.00179	.00435	-.00068	.00161
31-7	FHBf	170.2	32.1	0.	0.	.503	-.2	4.0	.0	.0	-2.5	4.2	.0435	.00339	-.00097	.00106	-.00200	.00074
31-8	FHBf	170.2	32.1	4.	0.	.499	3.0	4.0	.0	.0	-3.1	5.1	.0624	.00656	-.00182	.00002	-.00059	.00160
31-9	FHBf	170.2	32.1	-4.	0.	.503	-9.0	8.0	.0	.0	-2.7	5.0	.0319	.00072	-.00122	.00322	-.00066	.00087
31-10	FHBf	170.2	32.1	0.	0.	.504	-7.3	10.0	.0	.0	-4.2	7.4	.0558	.00149	-.00120	.00430	-.00105	.00110
31-11	FHBf	170.2	32.1	-0.	0.	.504	-3.0	8.0	.0	.0	-2.0	3.0	.0239	.00226	-.00033	.00191	-.00092	.00027
31-13	FHBf	170.2	32.1	-8.	0.	.503	-6.0	8.0	.0	.0	-.3	1.1	.0491	.00130	-.00127	.00325	-.00046	.00066
31-14	FHBf	170.2	32.1	0.	0.	.503	2.9	8.0	.0	.0	-1.3	1.1	.0293	.00324	-.00098	.00092	-.00043	.00067
31-15	FHBf	170.2	32.1	0.	4.	.503	.0	8.0	.0	.0	-2.5	4.0	.0511	.00457	-.00163	.00110	-.00046	.00117
31-16	FHBf	170.2	32.1	0.	-4.	.503	-9.5	8.0	.0	.0	-1.8	5.6	.0325	.00139	-.00176	.00331	-.00093	.00127
31-17	FHBf	170.2	32.1	0.	-4.	.504	-9.6	12.0	.0	.0	-3.5	4.6	.0664	.00107	-.00428	.00596	-.00109	.00325
31-18	FHBf	170.2	32.1	0.	-4.	.503	-9.0	10.0	.0	.0	-2.8	8.1	.0568	.00181	-.00351	.00431	.00101	.00276
31-19	FHBf	170.2	32.1	0.	4.	.503	-3.6	4.0	.0	.0	1.4	3.6	.0238	.00257	-.00194	.00196	-.00105	.00130
31-20	FHBf	170.2	32.1	0.	4.	.503	-6.6	12.0	.0	.0	-7.3	10.6	.0501	.00156	-.00247	.00321	-.00067	.00150
31-21	FHBf	170.2	32.1	0.	4.	.503	2.4	8.0	.0	.0	-1.6	1.6	.0616	.00453	-.00270	.00113	-.00045	.00276
31-22	FHBf	170.2	32.1	0.	0.	.504	-9.5	10.0	.0	.0	-1.0	8.6	.0657	.00330	-.00209	.00098	-.00049	.00138
31-23	FHBf	170.2	32.1	0.	0.	.504	-7.7	4.0	.0	.0	-3.5	7.7	.0574	.00114	-.00188	.00613	.00103	.00143
33-5	FHBf	213.2	49.9	0.	0.	1.012	-1.0	4.0	.0	.0	.9	1.0	.0620	.00214	-.00366	.00432	.00103	.00202
33-6	FHBf	213.2	49.9	-0.	0.	1.013	-1.0	8.0	.0	.0	2.4	4.0	.0127	.00809	-.00436	.00209	-.00782	.00294

TABLE XV - Concluded

RUN PT	CONF	V FT/SEC	q LB/FT²	σ1 DEG	φ DEG	μ	αE DEG	θE DEG	θ0 DEG	B1s DEG	A1s DEG	Bns DEG	CL/σ	CD/σ	CY/σ	CQ/σ	Cpm/σ	Cmu/σ
33- 7	FHBf	213.2	49.9	0.	0.	1.012	.8	.0	.0	.0	-1.7	-.8	.0185	.00566	-.00008	.00232	-.00323	-.00121
33- 8	FHBf	213.2	49.9	4.	0.	1.010	-3.7	4.0	-4.0	.0	7.3	7.7	.0112	.00823	-.00236	.00270	-.00115	-.00025
33- 9	FHBf	213.2	49.9	4.	0.	1.010	-.8	4.0	-4.0	.0	-4.3	4.8	.0552	.00850	-.00520	.00263	-.00322	.00286
33-10	FHBf	213.2	49.9	4.	4.	1.010	-3.1	4.0	4.0	.0	-8.1	7.1	.0086	.00775	-.00004	.00280	-.00123	-.00183
33-11	FHBf	213.2	49.9	4.	4.	1.012	-3.3	4.0	-4.0	.0	-2.8	3.3	.0123	.00808	-.00051	.00254	-.00293	-.00094
33-12	FHBf	213.2	49.9	0.	2.	1.012	-.5	4.0	4.0	.0	.7	.5	.0636	.00928	-.00507	.00223	-.00785	.00364
33-13	FHBf	213.2	49.9	-0.	2.	1.012	-3.7	4.0	-4.0	.0	-2.7	3.7	.0114	.00801	-.00157	.00245	-.00290	-.00018
33-14	FHBf	213.2	49.9	0.	2.	1.012	1.0	4.0	4.0	.0	-1.8	1.0	.0174	.00708	-.00111	.00238	-.00333	-.00036
33-15	FHBf	213.2	49.9	4.	2.	1.010	-3.3	4.0	-4.0	.0	-7.7	7.3	.0113	.00743	-.00124	.00279	-.00092	-.00105
33-16	FHBf	213.2	49.9	4.	2.	1.010	-.3	4.0	.0	.0	4.7	4.4	.0571	.00837	-.00428	.00265	-.00367	-.00233
33-17	FHBf	213.2	49.9	-0.	2.	1.012	1.2	4.0	4.0	.0	6.7	2.8	.0155	.00636	-.00097	.00264	-.00058	-.00138
33-18	FHBf	213.2	49.9	4.	-2.	1.010	-1.1	4.0	-4.0	.0	1.2	1.1	.0635	.00888	-.00763	.00223	-.00804	-.00565
33-19	FHBf	213.2	49.9	-0.	-2.	1.012	-4.2	4.0	4.0	.0	-2.1	4.2	.0119	.00824	-.00428	.00240	-.00281	.00167
33-20	FHBf	213.2	49.9	4.	-2.	1.010	-3.8	4.0	-4.0	.0	-7.3	7.8	.0111	.00795	-.00372	.00269	-.00110	.00070
33-21	FHBf	213.2	49.9	4.	-2.	1.010	-1.0	4.0	-4.0	.0	-4.0	5.0	.0559	.00845	-.00619	.00255	-.00348	.00364
33-22	FHBf	213.2	49.9	-0.	0.	1.012	-3.9	4.0	.0	.0	-2.1	3.9	.0130	.00907	-.00237	.00250	-.00258	.00042

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ROTOR BLADE STRESS AND FLAPPING DATA TABLES

TABLE XVI.	ROTOR BLADE MOMENT AND FLAPPING DATA, CONFIGURATION FHB											
RUN POINT	q , psf	μ	β, DEG		$M_{F\,3R}$, IN-LB		$M_{F\,6R}$, IN-LB		$M_{T\,18R}$, IN-LB		$M_{T\,35R}$, IN-LB	
			MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.
61- 5	11.9	.30	0.2	-3.3	9.	-3.	12.	-6.	4.	-5.	3.	-6.
61- 6	11.9	.29	7.0	-1.0	11.	-3.	17.	-6.	4.	-7.	3.	-7.
61- 7	11.9	.29	2.4	1.3	9.	-1.	14.	-7.	2.	-5.	1.	-6.
61- 8	11.9	.29	2.3	1.3	7.	-2.	13.	-6.	2.	-5.	3.	-3.
61- 9	11.9	.29	3.3	2.5	8.	-2.	12.	-7.	5.	-6.	3.	-5.
61-10	11.9	.29	2.7	1.8	6.	-4.	10.	-7.	5.	-3.	4.	-4.
61-11	11.9	.29	6.3	-3.3	10.	-3.	14.	-7.	4.	-5.	3.	-5.
61-12	11.9	.29	6.3	-3.2	10.	-2.	14.	-6.	4.	-5.	3.	-5.
61-13	11.9	.29	6.9	-1.8	11.	-3.	18.	-8.	2.	-7.	2.	-8.
61-14	11.9	.29	2.4	1.4	8.	-1.	14.	-4.	2.	-6.	3.	-5.
61-15	11.9	.29	2.3	1.3	8.	-1.	15.	-6.	2.	-5.	2.	-5.
61-16	11.9	.29	3.2	2.2	9.	-2.	14.	-7.	6.	-5.	2.	-5.
61-17	11.9	.29	2.3	1.4	7.	-2.	14.	-5.	4.	-5.	2.	-4.
61-18	11.9	.29	2.4	1.3	8.	-1.	16.	-5.	3.	-5.	1.	-6.
61-19	11.9	.29	7.1	-1.9	10.	-3.	18.	-7.	4.	-8.	3.	-7.
61-20	11.9	.29	6.2	-3.2	8.	-3.	14.	-8.	4.	-5.	3.	-5.
62- 5	32.2	.50	2.2	0.0	13.	-7.	18.	-9.	5.	-7.	4.	-6.
62- 6	32.2	.50	3.6	0.6	19.	-11.	25.	-12.	11.	-19.	11.	-18.
62- 7	32.2	.50	2.6	0.5	12.	-7.	16.	-14.	8.	-6.	6.	-8.
62- 8	32.2	.50	3.4	1.0	14.	-8.	21.	-19.	8.	-14.	7.	-13.
62- 9	32.2	.50	2.0	0.0	14.	-5.	19.	-9.	5.	-7.	6.	-7.
62-10	32.2	.50	4.1	0.8	26.	-11.	25.	-14.	14.	-25.	14.	-24.
62-11	32.2	.50	3.1	0.6	19.	-11.	23.	-12.	13.	-20.	12.	-19.
62-12	32.2	.50	1.5	-0.2	13.	-5.	14.	-10.	7.	-4.	6.	-5.
62-13	32.2	.50	6.5	-4.2	17.	-9.	19.	-11.	12.	-9.	11.	-10.
62-14	32.2	.50	1.4	-0.3	11.	-7.	13.	-13.	9.	-4.	6.	-3.
62-15	32.2	.50	2.6	-0.3	14.	-7.	17.	-13.	10.	-7.	7.	-7.
62-16	32.2	.50	1.7	-0.3	14.	-7.	18.	-11.	5.	-8.	4.	-9.
62-17	32.2	.50	3.9	0.8	21.	-12.	30.	-12.	16.	-25.	14.	-25.
62-18	32.2	.50	3.4	0.4	22.	-9.	25.	-13.	13.	-18.	12.	-18.
62-19	32.2	.50	1.7	-0.2	14.	-5.	17.	-8.	8.	-5.	6.	-6.
62-20	32.2	.50	6.3	-3.9	20.	-8.	18.	-14.	10.	-9.	9.	-10.
62-21	32.2	.50	2.5	0.2	15.	-8.	19.	-15.	11.	-6.	8.	-9.
62-22	32.2	.50	1.3	-0.2	7.	-9.	12.	-12.	8.	-2.	5.	-3.
41- 5	49.8	1.01	6.6	-4.8	32.	-30.	37.	-18.	10.	-14.	—	—
41- 6	49.8	1.01	2.1	-1.3	25.	-22.	21.	-19.	18.	-8.	60.	0.
41- 7	49.8	1.01	1.7	-1.0	22.	-23.	20.	-18.	6.	-7.	52.	5.
41- 8	49.8	1.01	4.6	-4.4	21.	-23.	20.	-20.	14.	-8.	55.	-11.
41- 9	49.8	1.01	3.9	-1.3	37.	-35.	35.	-20.	10.	-13.	98.	-40.
41-10	49.8	1.01	4.8	-4.5	25.	-28.	23.	-18.	13.	-8.	60.	-10.
41-11	49.8	1.01	2.0	-1.0	20.	-25.	22.	-20.	18.	-7.	65.	-8.
41-12	49.8	1.01	7.2	-5.0	38.	-35.	37.	-20.	9.	-15.	98.	-32.
41-13	49.8	1.01	4.3	-5.3	30.	-35.	30.	-20.	22.	-8.	60.	-15.
41-14	49.8	1.01	1.5	-0.5	27.	-25.	25.	-18.	5.	-7.	54.	0.
41-15	49.8	1.01	4.6	-4.5	22.	-25.	20.	-28.	13.	-8.	61.	-8.
41-16	49.8	1.01	4.5	-1.3	35.	-30.	35.	-19.	10.	-3.	94.	-32.
41-17	49.8	1.01	5.0	-4.5	25.	-25.	27.	-18.	7.	-9.	60.	-7.
41-18	49.8	1.01	7.1	-5.1	40.	-19.	38.	-35.	17.	-16.	98.	-45.
41-19	49.8	1.01	2.0	-1.0	23.	-25.	20.	-19.	13.	-8.	60.	-10.
41-20	49.8	1.01	4.5	-4.3	22.	-25.	21.	-20.	16.	-9.	56.	-9.
41-22	49.8	1.01	4.4	-1.0	45.	-32.	40.	-19.	8.	-14.	95.	-30.
41-23	49.8	1.01	2.0	-1.2	25.	-23.	22.	-18.	13.	-8.	57.	-7.

TABLE XVII. ROTOR BLADE MOMENT AND FLAPPING DATA, CONFIGURATION FHBf

RUN-POINT	q, psf	μ	β, DEG MAX	β, DEG MIN	$M_{F\,3R}$, IN-LB MAX	$M_{F\,3R}$, IN-LB MIN	$M_{F\,6R}$, IN-LB MAX	$M_{F\,6R}$, IN-LB MIN	$M_{T\,18R}$, IN-LB MAX	$M_{T\,18R}$, IN-LB MIN	$M_{T\,35R}$, IN-LB MAX	$M_{T\,35R}$, IN-LB MIN
29- 5	11.8	.30	0.0	0.0	5.	-5.	—	—	—	—	2.	-2.
29- 6	11.8	.29	5.5	-3.0	17.	-9.	—	—	—	—	3.	-8.
29- 7	11.8	.29	6.0	-1.5	18.	-12.	—	—	—	—	3.	-11.
29- 8	11.8	.29	2.6	1.0	13.	-9.	—	—	—	—	3.	-10.
29- 9	11.8	.29	2.3	1.0	10.	-10.	—	—	—	—	4.	-8.
29-10	11.8	.29	3.5	2.2	15.	-13.	—	—	—	—	5.	-9.
29-11	11.8	.29	2.8	1.5	12.	-16.	—	—	—	—	6.	-7.
29-12	11.8	.29	5.6	-3.3	17.	-14.	—	—	—	—	4.	-9.
29-13	11.8	.29	5.8	-1.5	17.	-12.	17.	-9.	8.	-10.	5.	-12.
29-14	11.8	.29	2.7	1.1	13.	-11.	13.	-7.	7.	-7.	5.	-10.
29-15	11.8	.29	2.5	-0.8	12.	-11.	13.	-5.	3.	-3.	5.	-8.
29-16	11.8	.29	3.4	2.0	15.	-13.	13.	-9.	3.	-4.	8.	-9.
29-17	11.8	.29	3.5	1.9	16.	-14.	14.	-8.	9.	-9.	5.	-10.
29-18	11.8	.30	2.5	-0.5	13.	-12.	12.	-6.	8.	-6.	4.	-10.
30- 6	11.8	.29	2.4	0.3	15.	-9.	13.	-6.	6.	-8.	3.	-10.
30- 7	11.8	.29	2.4	1.0	14.	-8.	14.	-5.	4.	-8.	2.	-9.
30- 8	11.8	.29	5.6	-1.6	17.	-12.	19.	-10.	8.	-12.	5.	-12.
30- 9	11.8	.30	5.5	-3.5	17.	-10.	13.	-6.	5.	-7.	4.	-8.
30-10	11.8	.30	0.5	-0.5	10.	-13.	8.	-7.	8.	-3.	7.	-3.
30-11	11.8	.30	0.0	0.0	5.	-5.	—	—	—	—	2.	-2.
31- 5	32.1	.50	2.5	-2.5	15.	-15.	18.	-11.	8.	-12.	8.	-15.
31- 7	32.1	.50	2.8	0.0	12.	-18.	19.	-13.	11.	-9.	10.	-15.
31- 8	32.1	.50	3.5	-1.0	12.	-18.	19.	-15.	10.	-18.	13.	-20.
31- 9	32.1	.50	2.5	0.0	15.	-13.	18.	-11.	8.	-9.	13.	-14.
31-10	32.1	.50	4.3	0.0	30.	-20.	20.	-12.	11.	-15.	13.	-22.
31-11	32.1	.50	2.5	-0.5	20.	-15.	20.	-13.	12.	-10.	15.	-17.
31-12	32.1	.50	6.0	-4.3	25.	-23.	17.	-12.	18.	-15.	14.	-20.
31-13	32.1	.50	2.0	-1.0	20.	-17.	17.	-14.	13.	-8.	15.	-12.
31-14	32.1	.50	3.5	-0.5	20.	-20.	18.	-14.	11.	-12.	15.	-18.
31-15	32.1	.50	2.5	-0.5	18.	-17.	14.	-10.	8.	-13.	10.	-13.
31-16	32.1	.50	4.5	0.5	30.	-25.	14.	-13.	11.	-16.	13.	-23.
31-17	32.1	.50	4.0	0.0	28.	-25.	19.	-13.	11.	-13.	14.	-23.
31-18	32.1	.50	2.3	-0.5	20.	-18.	19.	-12.	11.	-9.	14.	-14.
31-19	32.1	.50	6.5	-4.0	30.	-20.	14.	-13.	15.	-14.	15.	-22.
31-20	32.1	.50	3.5	0.0	23.	-25.	16.	-15.	12.	-11.	15.	-18.
31-21	32.1	.50	2.0	-0.8	18.	-20.	17.	-15.	12.	-7.	15.	-13.
31-22	32.1	.50	5.0	0.5	30.	-25.	20.	-13.	12.	-18.	15.	-25.
31-23	32.1	.50	4.3	0.0	30.	-25.	18.	-12.	12.	-13.	14.	-22.
33- 5	49.9	1.01	0.0	-4.4	—	—	35.	-55.	14.	-22.	14.	-22.
33- 6	49.9	1.01	3.0	-2.0	—	—	33.	-38.	20.	-8.	18.	-10.
33- 7	49.9	1.01	2.8	-1.5	—	—	20.	-40.	14.	-14.	10.	-14.
33- 8	49.9	1.01	6.0	-5.3	—	—	35.	-38.	20.	-8.	18.	-12.
33- 9	49.9	1.01	5.5	-1.5	—	—	35.	-55	13.	-20.	12.	-20.
33-10	49.9	1.01	6.2	-5.5	—	—	33.	-35	16.	-8.	17.	-10.
33-11	49.9	1.01	3.5	-1.8	—	—	33.	-37	13.	-9.	17.	-12.
33-12	49.9	1.01	2.2	-4.3	—	—	33.	-55	15.	-22.	16.	-24.
33-13	49.9	1.01	3.1	-1.8	29.	-34.	35.	-38	18.	-10.	20.	-11.
33-14	49.9	1.01	2.8	-1.5	24.	-31.	23.	-37	12.	-13.	10.	-14.
33-15	49.9	1.01	6.3	-5.5	25.	-36.	35.	-40	20.	-10.	18.	-13.
33-16	49.9	1.01	5.7	-1.5	33.	-38.	35.	-60.	13.	-22.	13.	-25.
33-17	49.9	1.01	6.5	-5.3	—	—	18.	-40.	13.	-15.	10.	-17.
33-18	49.9	1.01	5.0	-4.5	—	—	27.	-55.	15.	-23.	17.	-23.
33-19	49.9	1.01	1.8	-3.0	—	—	30.	-40.	22.	-6.	18.	-12.
33-20	49.9	1.01	6.0	-5.0	—	—	30.	-38.	22.	-6.	19.	-15.
33-21	49.9	1.01	5.5	-1.5	—	—	30.	-58.	29.	-3.	10.	-21.
33-22	49.9	1.01	3.0	-1.8	—	—	27.	-38.	18.	-8.	18.	-13.

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13. ABSTRACT

This report presents the results of an experimental investigation of the effects of
rotor head configuration and fuselage yaw on the wake characteristics and rotor
performance of a generalized 1/8th scale helicopter model. Several rotor head
configurations were tested with and without rotor blades at various operating
conditions. Fuselage yaw angle was varied for all conditions tested. The flow
direction and dynamic pressure at the tail of the model were measured, as were
rotor shaft forces and moments. When the model was tested with the rotor,
blade vibratory stresses were measured. Wake survey data were obtained with
and without rotor blades; however, the data obtained with blades were not consistent.

14. KEY WORDS	LINK A		LINK B		LINK C	
	ROLE	WT	ROLE	WT	ROLE	WT
Helicopter Wake Characteristics						
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Rotor Head Drag						
Helicopter Yaw						